

# Manufacturers RECORD

## An Exponent of Americanism

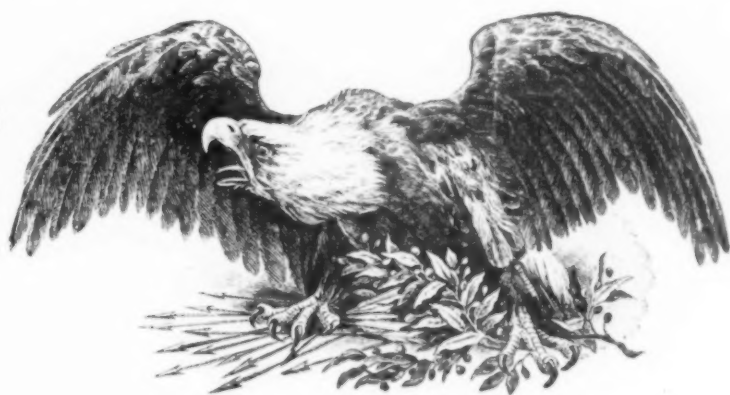
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BALTIMORE, MD., AUGUST 29, 1918

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THE FIGHTING EAGLE



OF AMERICA

### *Germany Already Planning for Another War*

Amid all the gigantic struggle of this hour, leaders in Germany are seriously making their plans for what they call "the next war." It is their definite intention if they do not win this war and win everything for which they are fighting, and that means world domination—to plan on a still larger scale for "the next war."

This thought is being pressed upon German people, and they are being told by their leaders that Germany must even now begin to look forward to "the next war."

It is the belief of these people that if they cannot conquer the world this time, they must bring about a peace which will leave Germany in a position, learning by present experience, to prepare on a still larger scale for their next great effort to conquer all mankind.

This is no idle or visionary dream on the part of Germany, for if Germany could bring about a peace which would leave it and its allies unconquered, it would be in immediate shape to concentrate its entire activities, mental and financial, to the building up of a still greater fighting machine for that next war to which Germany is looking forward, as for years it looked forward to the day when it hoped to be able to crush France and England and then to crush America.

A premature peace or a peace with an unbeaten and uncrushed Germany would leave that country in a position to secure control of Russia, with its boundless resources, with its 9,000,000 square miles of territory, or one-sixth of the land area of the world, and with nearly 200,000,000 people, who under good leadership could be made into an army of tremendous fighting power.

With Russia in its possession, Germany would become the greatest financial, industrial and military power in the world, so far surpassing in that respect the combined wealth and power of Great Britain and the United States that it would be able to win the next war.

Moreover, while Germany was getting ready for that war the rest of the world would have to concentrate its entire energy upon a feverish activity in the creation of fighting machines with all the wealth and all the power of these countries given up to the building up of armies, and navies and the making of munitions, so that the entire world would be but one vast military camp.

The complete and overwhelming defeat of Germany in this war and a drastic penalty imposed upon Germany and its allies, a penalty of death for the leaders, and a financial indemnity which would tax those countries for fifty years to meet it, is the only possible salvation for the world from German domination or from a continued concentration of the world's thoughts upon war to the exclusion of everything else, with the strong probability that if Germany could absorb Russia it would then completely overrun the world.

This is the plain, simple, easily understood situation which confronts us, and he who does not see it is as blind to the truth as were those who in 1914, when Germany launched its war upon Belgium, refused to see that it had launched war upon all civilization, and that all civilization must unite for the destruction of Germany or else be crushed by Germany.

On to Berlin!

# **BETHLEHEM STEEL COMPANY**

## **IRON AND STEEL PRODUCTS**

**GENERAL OFFICES:  
SOUTH BETHLEHEM, PA.**

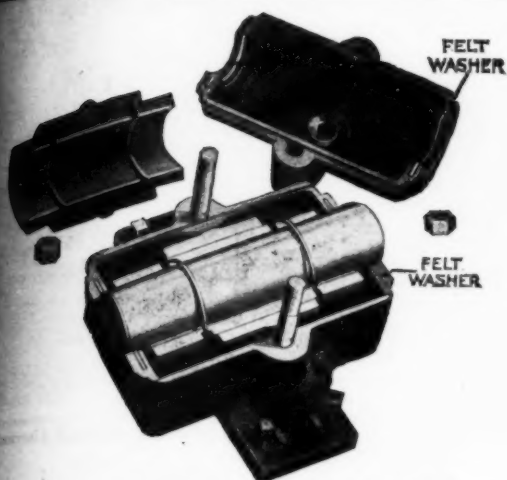


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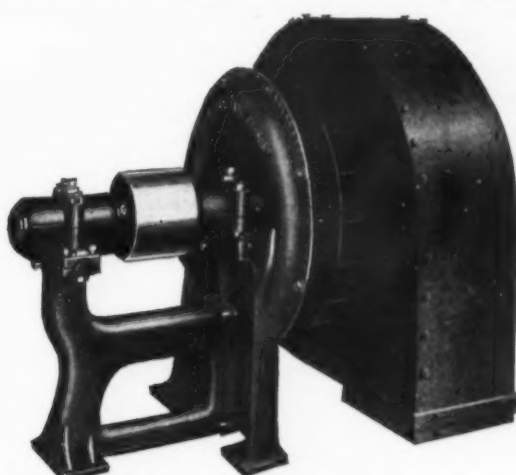


# CLARAGE FAN COMPANY.

KALAMAZOO



Clarage Special Bearings, dustproof and oiltight—self-aligning in every plane.



Clarage, Single Cotton Exhauster, showing wheel partly removed from casing.

## CLARAGE

KALAMAZOO

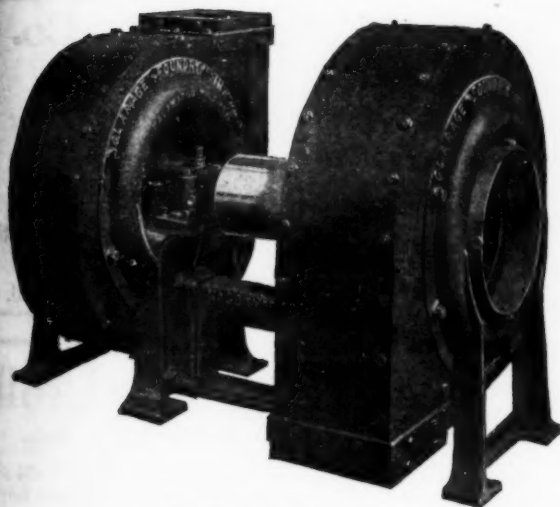
### Cotton Exhausters

Clarage Cotton Fans are built to give Superior Service with Least Possible Attention.

The Clarage "High Efficiency" Multiblade Wheel was especially designed for Elevator and Seed-Blowing Fans. These wheels run at a much lower speed and actually save power.

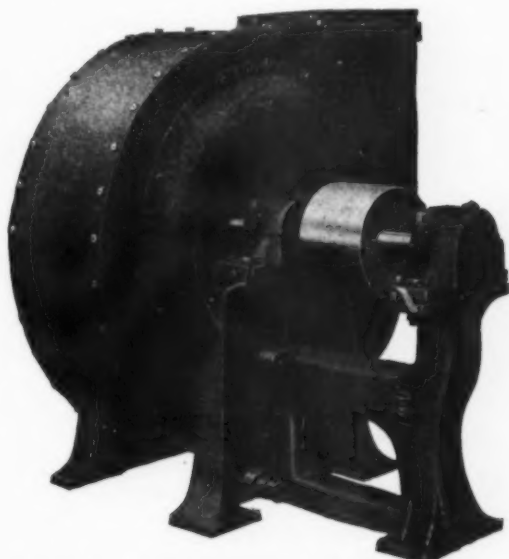
Clarage Exhausters are furnished with Special Bearings—entirely enclosed, dust-proof and oil-tight—such bearings reduce the fire risk.

Your gin manufacturer will supply you with Clarage Cotton Exhausters if you insist.



Clarage, Double Cotton Fan.

**CLARAGE  
FAN  
COMPANY**  
KALAMAZOO  
MICH.

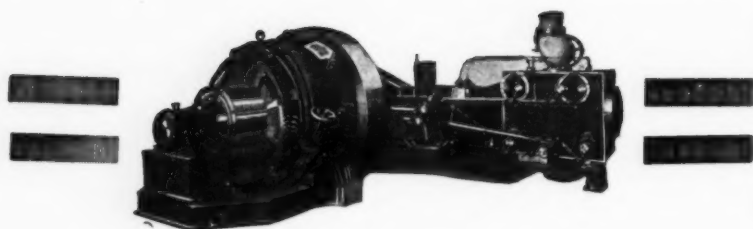


Clarage, Single Cotton Fan, equipped with Ball Bearings, SKF Balls and Cases—especially designed Clarage Bearing Cases.

# CLARAGE FAN COMPANY.

KALAMAZOO





## BALL CORLISS ENGINE

WITH NON-RELEASING GEAR

**T**HE essential feature in a power unit is *Reliable Operation*. It's a fact that you can't get away from. The wheels must go 'round in order to keep up production. In many plants the actual cost of power is a small item in the cost of the product, but an interruption to service is a costly item.

Ball engines are built to meet the needs of particular buyers, men who appreciate that it takes good design, good workmanship, and good materials to meet the demands of modern power plant practice.

Surround your plant with an atmosphere of security by installing a Ball Engine.

*It's a paying investment*

**BALL ENGINE CO., ERIE, PA.**

### Morgan Construction Company WORCESTER, MASS.

Manufacture the **Morgan Producer-Gas Machines** and **Dyblie Gas Reversing Valves**, whose records of capacity, efficiency and labor-saving stand pre-eminent.

Many complete Gas plants on open hearth service are now being installed for leading steel works.

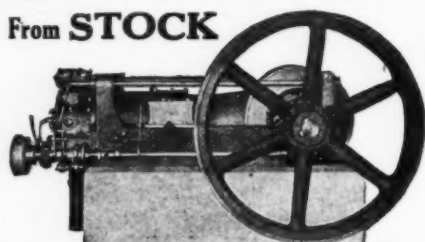
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Starts on its own fuel—no storing of compressed air.  
No hot bulb—no standby losses.  
Save fuel—Save wages.

**BOEC**  
OIL ENGINES

Burn any liquid fuel.  
Designed for American conditions.

Baltimore Oil Engine Co.  
BALTIMORE, MD.



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Cast Teeth Machine  
Molded or Teeth Machine Cut  
Spurs, Bevels, Miters,  
Worm Wheels, Worms,  
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Made of Cast Iron, Cast Steel,  
Semi-Steel, Brass, Bronze, Steel



**H. W. CALDWELL & SON CO.**

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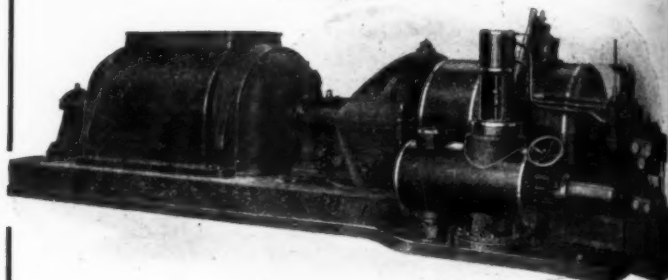
DALLAS, TEXAS, 709 Main St.

Efficiency—Reliability—Simplicity

## Allis-Chalmers Steam Turbines

Show sustained economy after years of operation

Units built in sizes from 200 K. W. up



4000 K. W. Max. 80% P. F. 3600 R.P.M. Steam Turbine and Alternator

**Allis-Chalmers Manufacturing Co.**

Milwaukee, Wis.

Sales Offices in All Principal Cities

For all Canadian business refer to Canadian Allis-Chalmers Ltd., Toronto, Ont., Canada

## ENGINES BOILERS

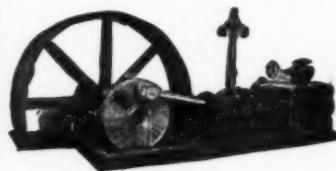
Steel Casing Settings, Heaters, Stacks, Tanks, Stills

THE HOUSTON, STANWOOD & GAMBLE CO.  
CINCINNATI

### Hardie-Tynes Mfg. Co.

Builders:

Corliss Engines  
Air Compressors  
Mining Hoist  
Heavy Castings



FOR CATALOGUE AND PRICES

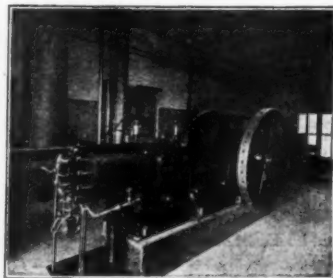
Address HARDIE-TYNES MFG. CO.

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### GIANT SEMI-DIESEL FUEL OIL ENGINE

Owned by the Laurel Milling Co., Laurel, Neb.

Absence of intricate mechanism and delicate adjustments and general simplicity of construction make the Giant Engine the ideal prime mover for isolated power plants. No expert attendance is required and the cost of operation is extremely low.



Made Single and Duplex  
in capacities from 20 to 180 H. P.

Send for Bulletin 34-W.

**Chicago Pneumatic Tool Company**

1059 Fisher Bldg. 52 Vanderbilt Ave.  
CHICAGO NEW YORK

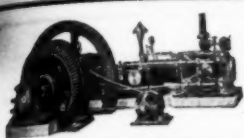
BRANCHES EVERYWHERE



# STIMPSON

## BRASS AND COPPER

# "TUBING"



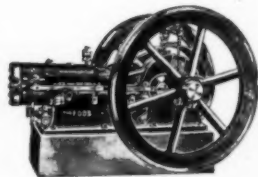
**CORLISS ENGINES**  
Boilers of All Styles and Sizes  
**MURRAY IRON WORKS COMPANY**  
BURLINGTON, IOWA  
INCORPORATED FEBRUARY 1, 1870.  
Engine on Exhibition in the Bourse, Philadelphia, Pa.



**Run on Oil and Gas**

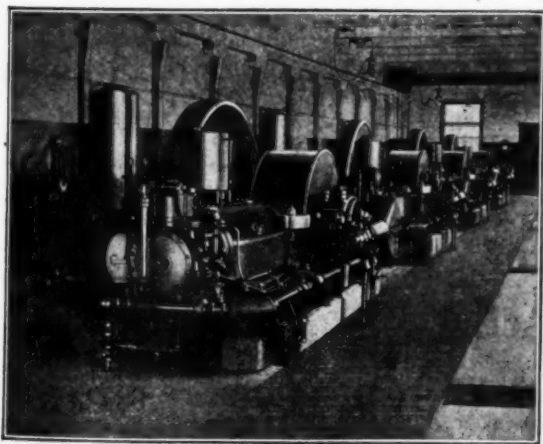
1½ to 400 H. P.

Inbuilt Quality explains the leadership of this great engine—for instance, the 28 years' record of the engine owned by Frank R. Lemon, Vicksburg, Mich., and thousands of other engines that have been in operation from 10 to 25 years.



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Four 150 H. P. Type "FH" De La Vergne Oil Engines, Direct Connected to Horizontal High-Pressure Oil Pumps, at Gulf Pipe Line Station, Chambers, Okla.

Specially designed to use all forms of crude or fuel oil.  
Five customers operate 425 De La Vergne oil engines, aggregating 35,000 horsepower.

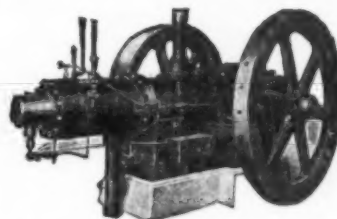
Send for our bulletins:

- No. 158—Type "DH" Oil Engines.
- No. 160—De La Vergne Power Plants.
- No. 166—Type "FH" Oil Engines.
- No. 159—Oil Reclaimers.

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Oil Engines, Ice-Making and Refrigerating Machines

**For Lighting Pumping or Power Plants**  
—USE—  
**MUNCIE CRUDE OIL ENGINES**

Standard  
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10 to 35  
H. P.



Heavy  
Duty Types  
40 to 125  
H. P.

USES LESS THAN ¾ PINT PER H. P.

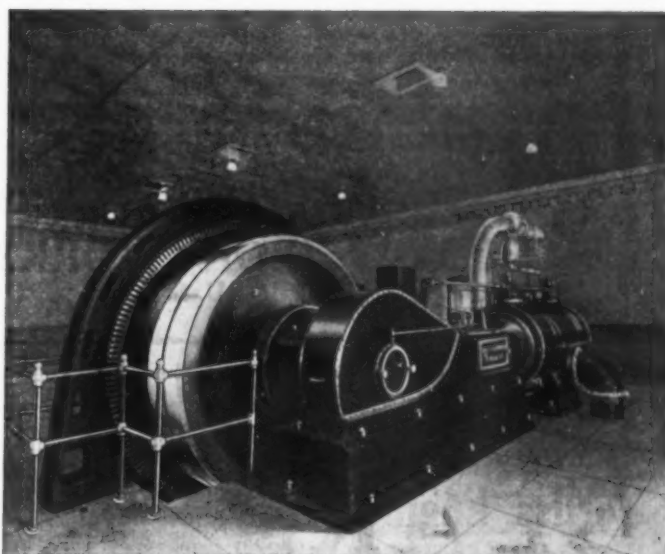
Catalogue and Specifications on Request.

**MUNCIE OIL ENGINE COMPANY**

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Muncie, Ind., U. S. A.

**The Ames Una-Flow Engine**



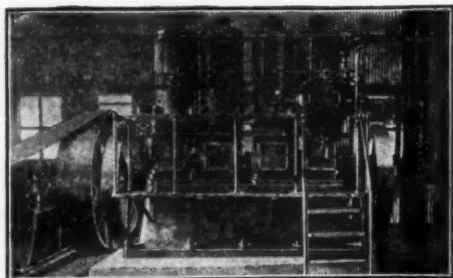
500 H. P. AMES UNA-FLOW ENGINE INSTALLATION

The superiority of the Ames Una-Flow is because of Ames design and workmanship built in the engine. Repeat orders from satisfied customers justify our claims and guarantees. Condensing and non-condensing in sizes 50 to 1000 H. P.

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In use by U. S.  
and Foreign  
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Throughout the  
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Ask any Mietz Oil Engine user.

*Catalog with full details gladly on request*

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**We are Southern Manufacturers and Make our own Engines and Boilers and guarantee them; when you deal with us you get the benefit of over 50 years' experience.**

Our Engines and Boilers are now in use in many of the Ginneries, Oil Mills, Saw Mills and other manufacturing enterprises throughout the Southern States and Middle West.

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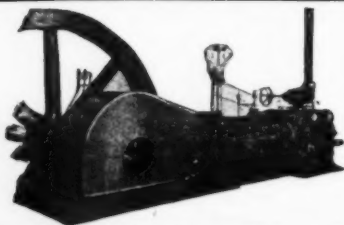
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Burned Out Motors and Generators Rewound. High Grade Armature Rewinding. Prompt Service. Workmanship Guaranteed.

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MAKE SAFE WELDING EASY

ARMCO Rods are 99.84 per cent. pure iron and are peculiarly free from sulphur, phosphorus, slag, oxides and other impurities that ordinarily destroy the homogeneity of the weld.

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REALFLEX answers to these specifications. In our large works we have used it for years and thus tested it under all conditions, finding it easy to install, durable and efficient.

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Youngstown, Ohio

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**Feeder Cable Bare and Insulated  
Transmission Cable  
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EXCEPTIONALLY LONG SPANS

**ALUMINUM CO. OF AMERICA**

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Active  
Service"**

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**Indicating Instruments**

In design, in material, in their structural perfection, they are thoroughly worthy to represent Weston ideas and ideals in the field of active service.

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The Weston A. C. Round Pattern Switchboard Group includes Ammeters, Voltmeters, Wattmeters (Single and Polyphase), Power Factor Meters, Frequency Meters and Synchroscopes.

Besides their extreme accuracy and serviceability, these instruments are highly desirable for their uniformity of size and style, the openness of their scales and their legibility from any angle.



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For many successive years the U. S. Navy has protected vitally important electrical circuits ashore and afloat with **ECONOMY** renewable FUSES.

History has repeated itself. A new contract has recently been awarded this company to fill the Navy's renewable fuse requirements for another year.

An inexpensive little "Drop Out" Renewal Link restores a

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As compared with the cost of Non-Renewable Fuses, the government has saved as high as \$76,480.00 on a single delivery to one navy yard.

In thousands of plants representing all branches of industry Economy Fuses and "Drop Out" Renewal Links cut annual fuse maintenance costs 80%.

Order by brand from your electrical jobber or dealer.

Write for Catalog 93.

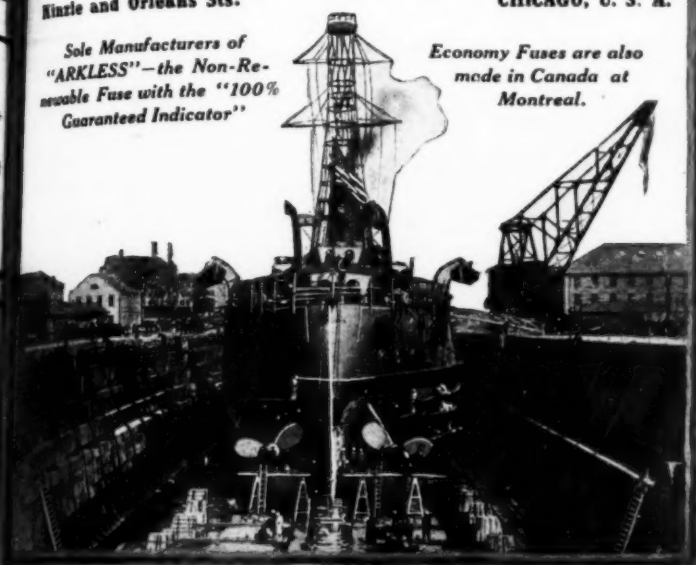
**Economy Fuse & Mfg. Co.**

Knox and Orleans Sts.

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Sole Manufacturers of  
"ARKLESS"—the Non-Renewable Fuse with the "100% Guaranteed Indicator"

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Constantly stopping, starting and reversing—splashed with water and exposed to the heat of the glowing plates and bars as they speed through the rolls—Lincoln Motors on the tilts, approach tables, handovers and conveyors of our steel mills are helping by constant steady service to keep up the supply of steel upon which so much of our fighting strength depends

Write for Bulletin on Motors 101-T

It introduces you to the rugged Lincoln Motor—the motor that will run under water.

This standard Lincoln Motor operated under water for over 3 years without damage to windings.



Lincoln Special Mill Motor designed for continuous operation under severe conditions.

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The storage battery locomotive is especially adapted to the heavy haulage needs of power plants, foundries, mills, lumber yards, etc. They release many men for more productive work, and eliminate the inefficient horse or mule.

Fire risk is reduced, for these locomotives can go in many places where smoke, fumes, hot cinders or exhaust gases forbid other means.

This service is hard and rough for batteries—it takes the steel-and-iron construction of the EDISON cell to stand up, year after year. EDISON cells are standard for this work; they give highest service efficiency.

Bulletin 608-M, "Edison Storage Batteries for Storage Battery Locomotives," on request.

**EDISON STORAGE BATTERY CO.**

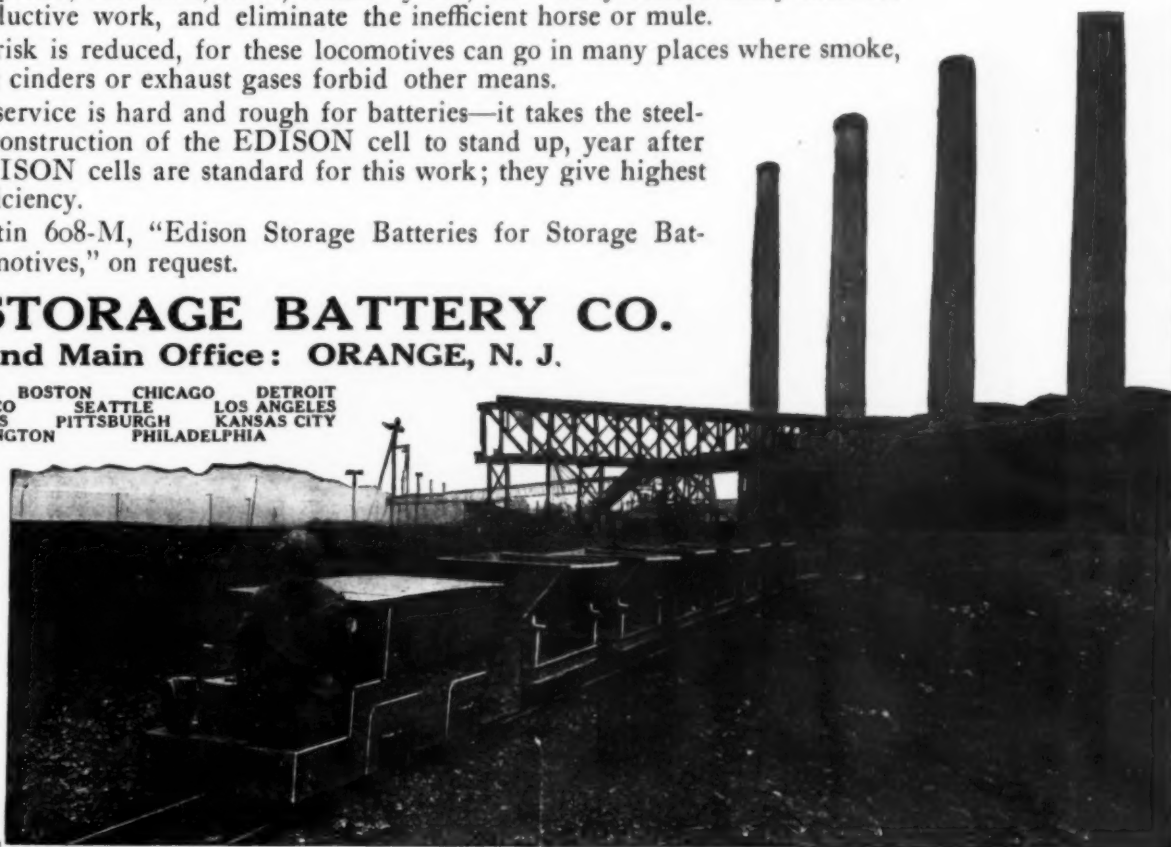
Factory and Main Office: ORANGE, N. J.

Distributors in

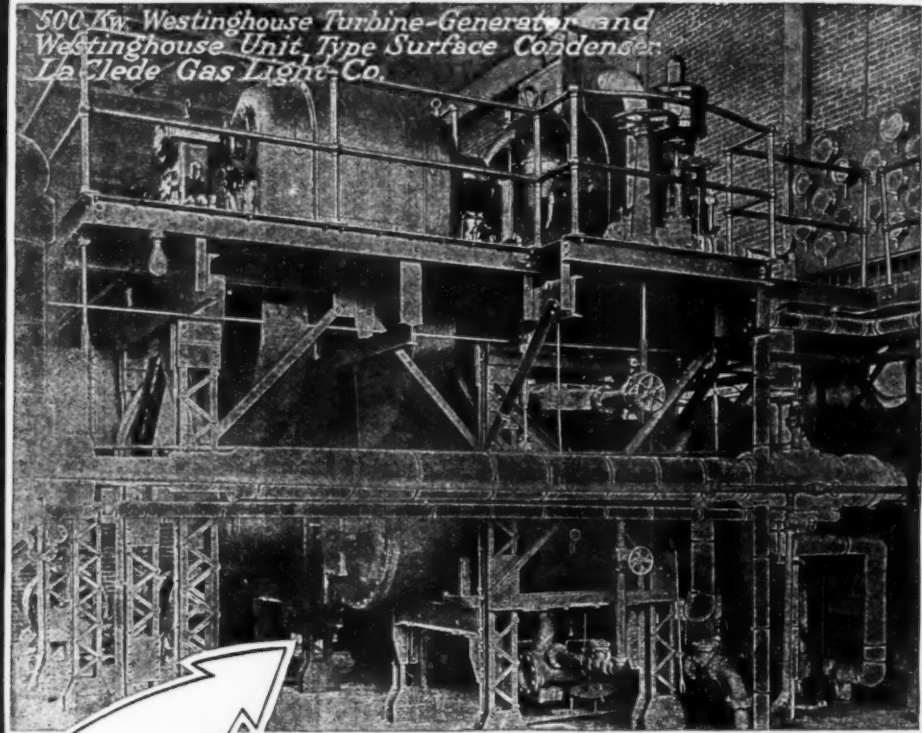
NEW YORK BOSTON CHICAGO DETROIT  
SAN FRANCISCO SEATTLE LOS ANGELES  
NEW ORLEANS PITTSBURGH KANSAS CITY  
WASHINGTON PHILADELPHIA

Handling ashes from power plant to dumping ground. The ashes are loaded from overhead ash bins into the side dump cars.

The Storage Battery Locomotive finds many uses in hauling lumber, castings and similar heavy loads; in spotting and switching freight cars, etc.



500 Kw. Westinghouse Turbine-Generator and  
Westinghouse Unit Type Surface Condenser.  
La Clede Gas Light Co.



Features  
of the  
Unit Type  
Surface  
Condenser:

- May be located directly beneath turbine.
- Air, Circulating and Condensate Pump directly underneath condenser, and all runners mounted on one shaft.
- One turbine drive for all pumps.
- Suction and discharge can be made in any direction to suit local conditions.
- Few joints and minimum amount of piping.
- No reciprocating parts to wear.
- Utmost simplicity of construction in every detail.
- Unsurpassed in the ability to maintain high vacuum constantly.

Unit  
Type  
Surface  
Condenser

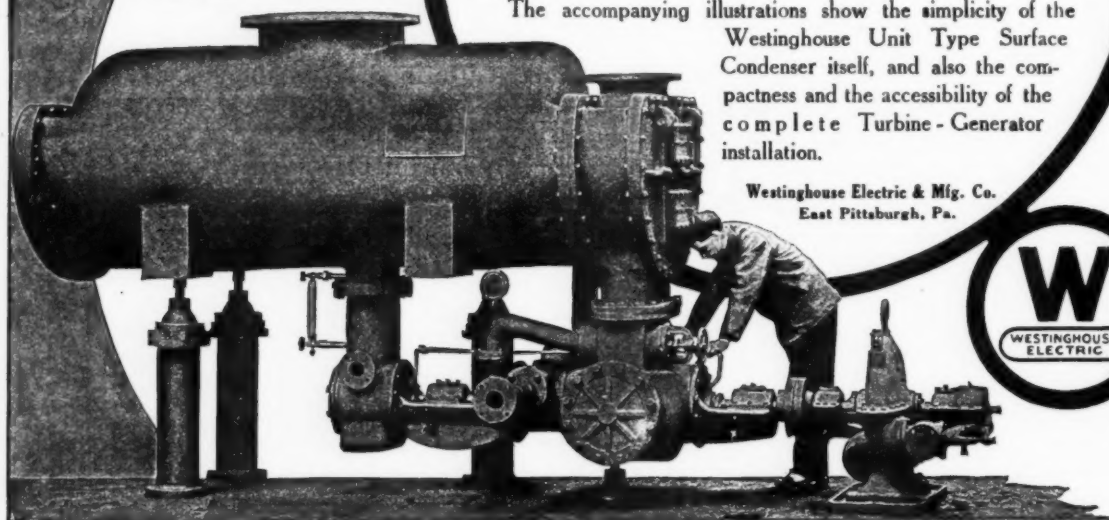
Floor space limitations often make—

## COMPACTNESS

—a consideration of first importance in the selection of power equipment. Compactness is often obtained only at a sacrifice in accessibility.

The accompanying illustrations show the simplicity of the Westinghouse Unit Type Surface Condenser itself, and also the compactness and the accessibility of the complete Turbine-Generator installation.

Westinghouse Electric & Mfg. Co.  
East Pittsburgh, Pa.



# Westinghouse



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85 Liberty Street, NEW YORK

BABCOCK & WILCOX—STIRLING—RUST

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STEAM SUPERHEATERS

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MECHANICAL STOKERS

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Stand Pipe, Self-Supporting Stacks, Tanks, Towers, all kinds of Structural and Plate Iron Work, Boiler Fronts, Grate Bars, all kinds of Castings.

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Pumps, Heaters, Injectors, Engine Supplies, and Repairs for Mills, Hotels, Public Works. Try

LOMBARD IRON WORKS, Augusta, Ga.



"Sectional Water Tube Boiler  
Specialists for Forty-  
Eight Years"

ROOT Water Tube Boilers  
Spiral Riveted Pipe

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LININGS FOR STEEL CHIMNEYS AND FLUES

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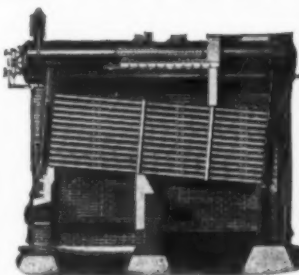


## WATER TUBE BOILER

Pressures 160 to 300 Lbs.

Units 100 to 1,000 H. P.

All steel construction. Drop for-  
ged, everlasting H H plates. Baff-  
ling, vertical, horizontal or combina-  
tion. Supported free of brick work.  
Can be arranged for superheater or  
any type stoker without radical  
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NEW ORLEANS, 943 Bolivar St.

## BOILERS OF ALL TYPES

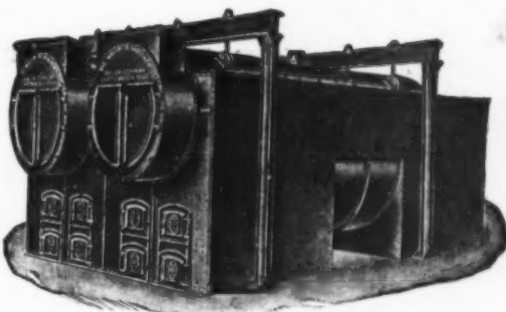
WITH OR  
WITHOUT

STEEL  
CASINGS

TANKS  
AND

TOWERS

STRUCTURAL  
STEEL WORK

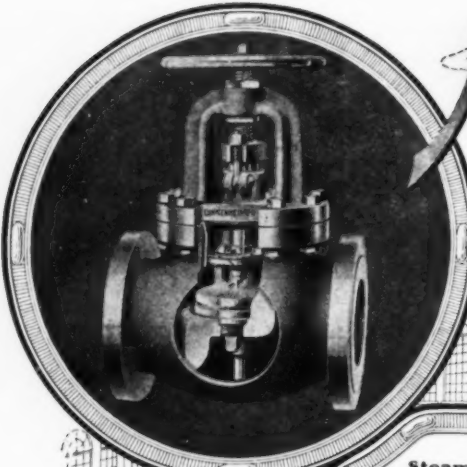


THE WALSH & WEIDNER BOILER CO.

CHATTANOOGA, TENN.

BRANCH SALES OFFICES—New York New Orleans Dallas Birmingham Havana

**Now**  
*they are  
proving  
their  
worth*



Steam Power Units  
Equipped with the  
**LUNKENHEIMER  
Balanced Throttle Valve**

are sure to give the continuous service necessary for maximum production of war essentials because every part of this valve can easily be repaired or renewed in case of wear.

When starting, the Lunkenheim Balanced Throttle Valve protects the power unit against a sudden flow of live steam into the cold cylinder, as the first turn of the handwheel opens the internal by-pass and permits only sufficient steam to pass to warm the unit. The opening of the by-pass also balances the main valve disc and enables the engineer to start the unit with ease and under perfect control.

Its practical design, with all parts renewable, not only insures the highest efficiency in operation, but also aids in the conservation of valve equipment, both of which are essentially necessary to our success in the war.

**THE LUNKENHEIMER CO.**  
"QUALITY"  
Largest Manufacturers of  
High Grade Engineering Specialties  
in the World  
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New York Chicago Boston London  
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**OUR "WAR PERIOD" APPEAL.**  
Engineering Appliances Are Prime War Essentials.  
Stocks of distributors and facilities of manufacturers must be adjusted to care for essential needs.  
Lunkenheim patrons are earnestly requested to assist in the common cause by confining their War Period specifications to requirements for essential plants, craft, vehicles or equipment.

## A FOSTER SUPERHEATER

Will Increase the Efficiency  
of Your Steam Plant

The value of superheated steam for increasing the efficiency and economy of steam engines, turbines, pumps, etc., is well known, and the ability of Foster Superheaters has been proved beyond doubt.

This Superheater will effect a considerable saving in even the most economical plant, and we will gladly explain to power plant owners what it will save for them and how it reduces steam plant depreciation.

Interesting printed matter  
promptly sent on request.

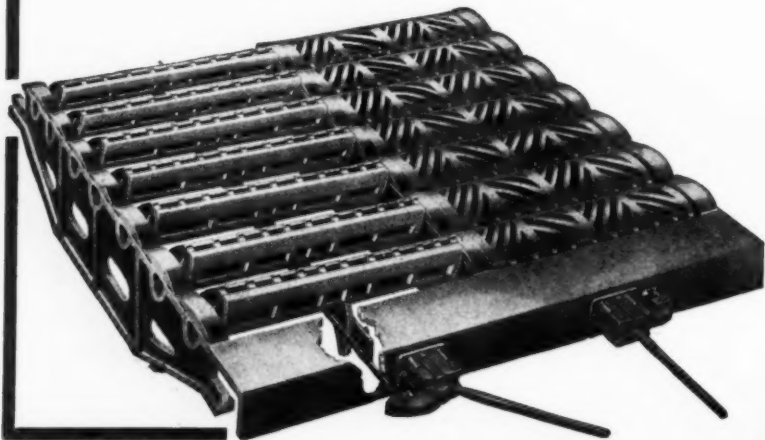
**Power Specialty Company**

111 Broadway, NEW YORK

Boston Philadelphia Pittsburgh Chicago San Francisco

## Uncle Sam O.K.'s Thomas Grate Bars

These letters from the War Department prove the advantages of Thomas Bars. And one feature that is specially important is that they pay for themselves in 60 to 65 days in coal saved. Coal is scarce, and outside of the saving to you it is a patriotic duty to save as much as possible and help win this war for democracy. The U. S. Government only buys the best—doesn't their O. K. mean something to you? Investigate! Get full particulars.



Write today for details  
about Thomas Elliptic  
Grate Bars for your plant.

**Thomas Grate Bar  
Company**  
Birmingham, Ala.

WAR DEPARTMENT  
UNITED STATES ENGINEER OFFICE  
First Cincinnati District  
Room 405 Custom House

Cincinnati, Ohio

March 25, 1918.

Thomas Grate Bar Company,  
Birmingham, Ala.:

Sirs—Replying to your letter of the 23d instant, relative to Thomas Grate Bars.

Our experience with your grate bar on towboats and dredges has been more satisfactory than with any other bars of plain or shaking type, but we have no data to show the amount of saving from the use of your bars.

Very respectfully,

R. K. JONES, District Engineer.

WAR DEPARTMENT  
UNITED STATES ENGINEER OFFICE  
Dam No. 22, Ohio River, Ravenswood, W. Va.

March 5, 1918.

From: The Assistant in Charge, Dam No. 22, O. R.

To: The District Engineer Office, Wheeling, W. Va.

Subject: Grates.

1. In answer to your letter of Jan. 3, 1918, reference to grates made by the Thomas Grate Bar Co., Birmingham, Ala., the rigid type has never been used on this work, but there is one set of the shaking type on the Str. Gen. Craighill which has proven very satisfactory in fuel saving. The saving in fuel has been 21 per cent. and with the present rate of coal makes a saving of about \$34.50 per month. The cost of the set is \$184.50. At this rate it takes practically 6 days to pay for a set of grate bars.

W. A. WELLS, Junior Engineer.

WAR DEPARTMENT  
UNITED STATES ENGINEER OFFICE  
Vicksburg District, Room 212, P. O. Building  
P. O. Drawer 421, Vicksburg, Miss.

March 21, 1918.

From: H. M. Marshall, Asst. Engr.

To: The Dist. Engr., Vicksburg, Miss.

Subject: Use of Thomas Grate Bars on U. S. Snagboat C. W. Howell, working on Red River, La.

No. of days. Without steam. Fuel used. Avg. per day.

Without bars—260 days:

Apr. 1, 1916, 439.9 tons coal, 1,884 at \$5—\$9,450

Mar. 1, 1917, 271½ cords wood, 1,943 at \$2—\$3,886

With bars—232 days:

Apr. 1, 1917, 256.4 tons coal, 1,105 at \$5—\$5,525

Mar. 1, 1918, 343¼ cords wood, 1,465 at \$2—\$2,930

Saving per day with bars, \$3.01—\$3.50.

Cost of bars, \$194.45.

Number of days' saving to pay for bars, 64½.

H. M. MARSHALL, Asst. Engr.



**Goldens' Foundry & Machine Co.**  
COLUMBUS, GEORGIA  
MANUFACTURERS OF  
**MACHINE MOULDED PULLEYS  
HANGERS                      SHAFTING**  
Couplings, Pillow Blocks, Floor Stands, Collars, Etc.  
Send for Price List and Discount Sheet

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CHARLESTON, S. C.

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**HIGH-GRADE FIRE BRICKS**  
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**"Mt. Savage" Fire Brick**  
BRANDS  
"MT. SAVAGE"      "REFRACTO"  
"M. S. A."          "CARBURETER"  
Capacity 20,000,000 Per Year  
**Union Mining Co.**      OFFICE AND WORKS  
MT. SAVAGE, MD.



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**FIRE CLAY**  
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36 Commercial Place, NORFOLK, VA.  
Agents for N. Y. Belting & Packing Co., Detroit Oak Belting Co., Dodge Sales &  
Eng. Co., Link-Belt Co., Nyanza Roofing, Jno. A. Roebbing's Sons Co., Henry Diaston  
& Sons, Simonds Mfg. Co., R. & J. Dick, Ltd., U. S. Graphite Co.'s Products.

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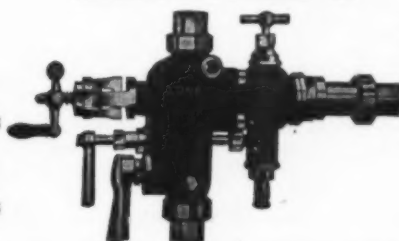
Prepared Fire Clay	Sewer and Culvert Pipe	Flue Lining
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STEVENS BROS. & CO.      Stevens Pottery      GEORGIA

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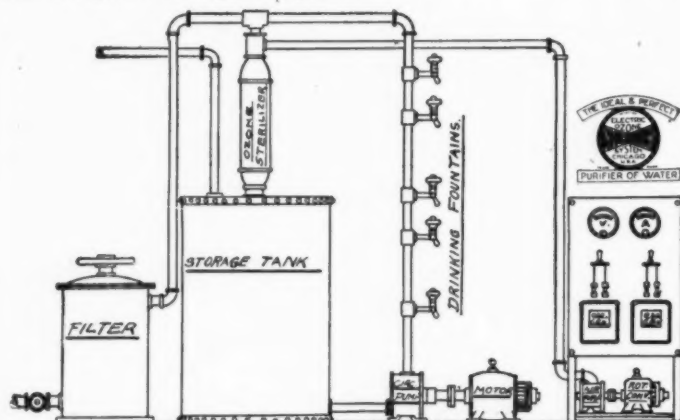
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used for the past five years by the 2,000 Officials and Employees of the Chicago office of the C. B. & Q. Ry. Co., has been supplied at a cost of only one cent for each 800 to 1000 gallons purified by an

### Electric Ozone Sterilizer System

which destroys and literally consumes and removes from the water the harmful germs and organic impurities.



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We can furnish a system to meet your drinking water requirements. If you have a filtering plant, or a circulating and cooling system, our system can be attached. If you buy bottled water, we can save you money—if any quantity, 50% or more.

We furnish systems for Hospitals, Clubs, Apartment and Office Buildings, Schools, Institutions, Factories, Offices, Swimming Pools and Municipalities.

Responsible Representatives Wanted.

**Electric Ozone Sterilizer Co.**

312 S. Dearborn St.

CHICAGO, ILL.

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The Arctic-Pownall Raw Water Ice-Making System makes pure, palatable, crystal clear ice, using any cheap motive power. For instance

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Polar Ice & Coal Co.,	Anniston, Ala.	50 Electricity
Mission Ice Co.,	San Antonio, Tex.	50 "
Pius Sinz,	Dallas, Tex.	15 Gas Engine
Centennial Ice Co.,	Birmingham, Ala.	40 Electricity

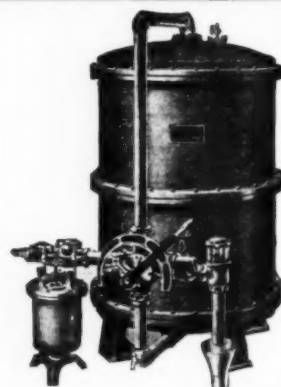
are just a few of your neighbors using this system.

*It will pay you to write us.*

**The Arctic Ice Machine Co.**

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CANTON, OHIO

Southern Office  
O. J. MORRIS, Grand Hotel Bldg., Cincinnati, Ohio



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PURE WATER  
Use

**Roberts Filters**

COMPLETE LINE SHOWN IN  
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Be Sure of the Address

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PURIFY WATER FOR ALL PURPOSES

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Our system provides for pure water for boiler feed and for all industrial purposes. Write for circular and special detailed information.

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PURIFICATION SYSTEMS  
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Clock, Motor, Organ,  
Car, Furniture, Agri-  
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and all kinds of fine  
and heavy springs.

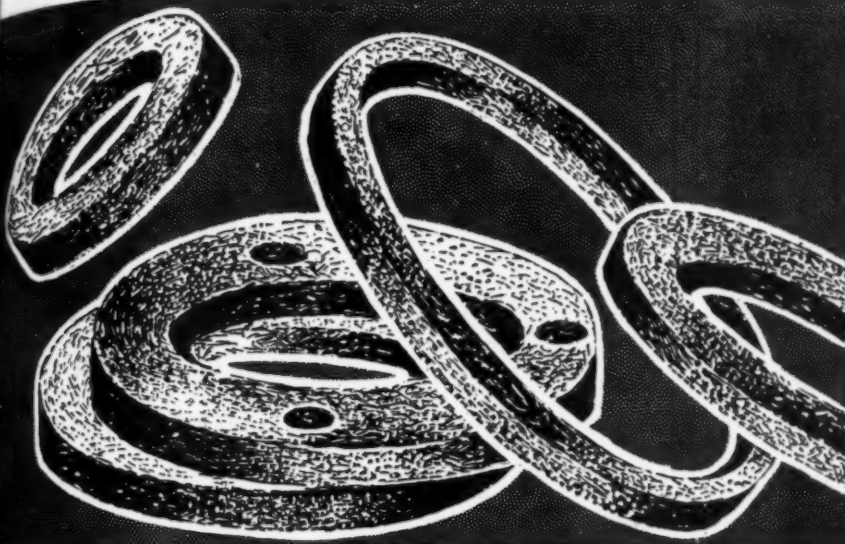
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*Booth*

**Mechanical Felt-Specialties**

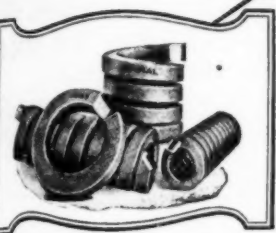
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We guarantee dependable goods, accuracy in production, prompt service and attractive prices.

*If it's made of Felt—Ask Booth.*

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High Pressure Asbestos  
Piston Rod—Valve Rod Packing

For all high-pressure steam service, marine high-speed engines, air compressors, Corless valves, piston-rod and valve-rod requirements and for rods running in oil, grease and acids. Best long-fibre asbestos, high-grade expansion back. Lubricated with graphite compound.

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April	\$4.15	July	\$4.18	Oct.	\$4.21
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W. S. S. WORTH \$5.00 JANUARY 1, 1923					

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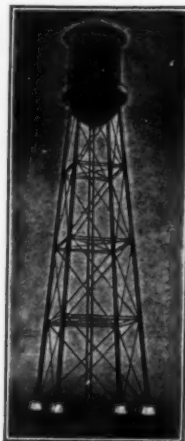
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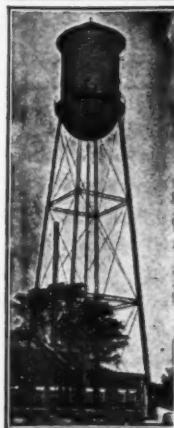
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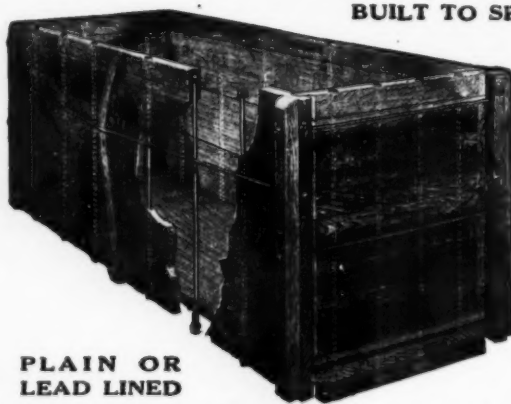
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BUILT TO SPECIFICATIONS  
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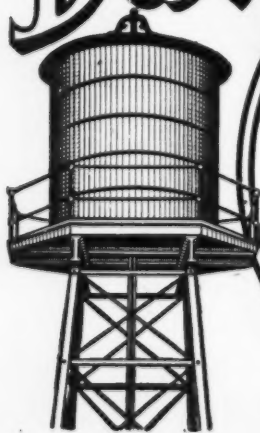
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Short stock and delayed orders are two trade bugaboos that users of the GANDY Stitched Cotton Duck Belt never have had to contend with. We pride ourselves on SERVICE—and leave no stone unturned to give it.  
So remember this: at the GANDY plant, the day your order comes in that same day your order is filled from the big ready-for-shipment stock of well seasoned GANDY Power and Conveyor Belts.  
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Our Stock and Odd Size List will help you—Why not write for it today?  
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Service Manager  
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The very nature of their product makes it imperative that only the best of rope be used. Otherwise their tents and awnings will not successfully withstand the constant strains and severe abuse to which they are subjected.

The fact that

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is the choice of many of the largest tent and awning manufacturers offers convincing proof of its superiority. When you are in the market for rope, where quality is of the utmost importance, select "Columbian" and in this way secure lasting satisfaction.

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Accuracy and speed are assured, because Starrett tapes are precise in graduations, plainly marked with bright figures on black background—so they are quickly and conveniently read.  
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The World's Greatest Toolmakers  
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For more than a century countless users who measure value by service have minimized their rope troubles by specifying Waterbury.  
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by the use of our No. 3 (Boronic-Copper Alloy), says one of the largest manufacturers of locomotives

This large concern buys our No. 3 (all metal, in shot form) in ton lots, and when asked what they use it for, they say "IN EVERYTHING." They discovered that they can increase the life of their babbitts 300 per cent. by the use of but three pounds of No. 3 to the hundred pounds of any grade of babbitt—entered in the simplest way.

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**Oil-less Bushings**  
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All genuine Graphited Oil-less Bushings have always been made at Bound Brook, U. S. A.  
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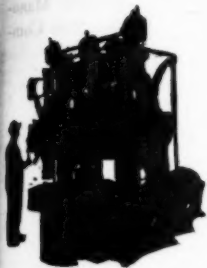
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WE OFFER YOU  
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For Heavy Loads  
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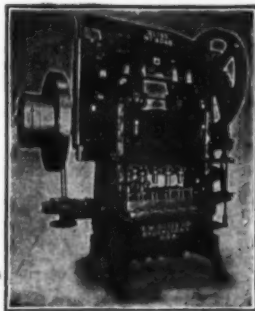
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Twelve Medals Awarded at International Expositions.

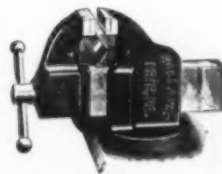
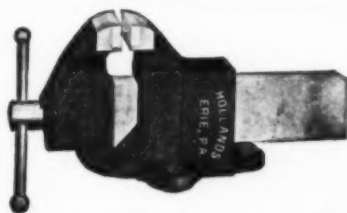
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Our goods are on sale in every leading hardware store in the United States and Canada. Copy of Catalogue will be sent free to any interested file user on application.

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HAVE A RECORD OF THIRTY YEARS SATISFACTORY SERVICE

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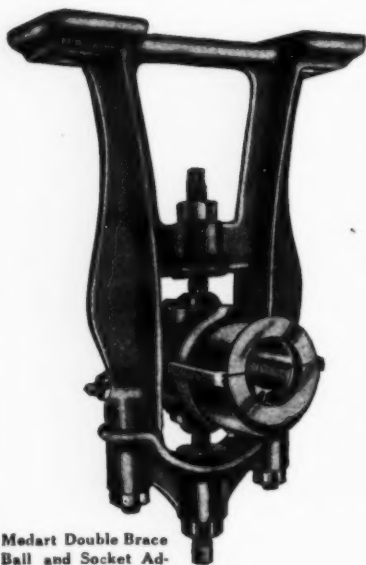
Carries any load. Easily moved anywhere. Let your work stay where it is, and take your tools, vise and bench to it. This is the modern way.

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for a fair price and there's none better for more money.



Medart Double Brace  
Ball and Socket Ad-  
justment Self Lubrica-  
ting Drop Hanger.

Very heavy, strong, rigid, open-bottom, four-way adjustment frame. Is easy to erect and align. Positive Steel Spring oil wiper in bearing obviates necessity for replenishing oil supply oftener than twice a year.

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Granting for the sake of argument that in the use of good Ring Oiling Bearings when properly aligned there may be, say ten per cent power loss through friction—there would be less with the use of Medart Bearings if carefully aligned when installed—would YOU say that the purchase of either Ball or Roller Bearings would actually repay you in saving only 65% of that 10% friction loss when considering their cost is from three to five times the cost of Medart Ring Oiling Bearings? This is not theory—it's fact, though it may explode a modern fallacy.

### What Reasoning Was Behind This?

Why did the AMERICAN TOOL WORKS COMPANY at Cincinnati, Ohio, not equip their marvelous, efficiencyized, new, five-story plant with either Ball or Roller Bearings? They bought hundreds of Medart Ring Oiling Bearings. Why also have these corporations not bought exclusively either Ball or Roller Bearings instead of Medart Ring Oiling Bearings? Wagner Electric Manufacturing Company, Acme Machine Tool Company, Cincinnati Grinder Company, Brown Shoe Company, Cincinnati Planer Company, International Shoe Company. Think it over.

IN ALL SIZES—SHIPMENTS FROM STOCK

## Medart Patent Pulley Company

Manufacturers for 39 Years of the Most Complete Line of Power Transmission Equipment

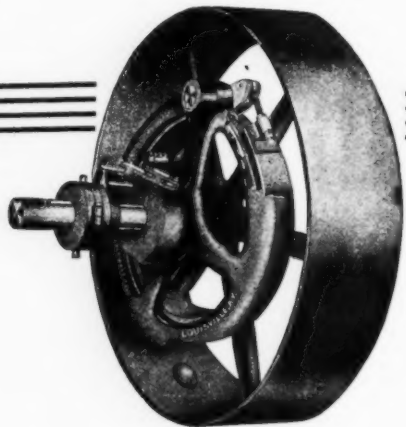
Works:

Office, Chicago:  
701 Peoples' Life Bldg.

ST. LOUIS, MO.

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The Caldwell Friction Clutch is safe because it is simple, compact and sturdy construction and easy to operate. Important parts are made of steel. No danger of breakage. One Lever Controls It. One Screw Adjusts It. Both in plain view. Both easy to get at.

The brake band grips the entire circumference of the friction ring and transmits the maximum power with minimum effort.

Be on the safe side—install a Caldwell Friction Clutch.

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INCORPORATED

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FRICTION  
CLUTCHES

THE cost of handling material around your plant—Does it make a perceptible dent in your profits—Then write

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They describe fully our complete line of machinery for the economical handling of bulk material, and undoubtedly contain information which will be of value to you.



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## STEEL HANGERS

Have Taken  
The Hard  
Work Out  
of Shaft  
Hanging

There was a time when hanging shafting was a back-breaking job.

Now it is different—because "Pioneer" Steel Hangers weigh about one-third as much as the old-style cast iron.

The cost of the mill-wrighting is also very materially reduced and the "Pioneer" does not break—Never.

Its price is no higher.

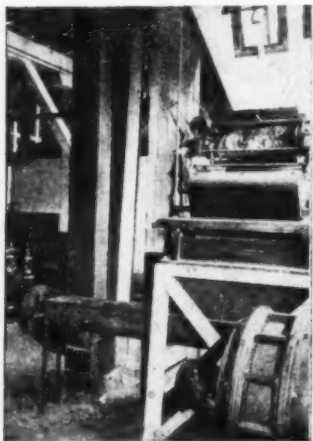
Ask for a copy of our new booklet "Transmission Data". Contains some plain truths worth reading.

**STANDARD PRESSED STEEL CO.**  
PHILADELPHIA, U. S. A.

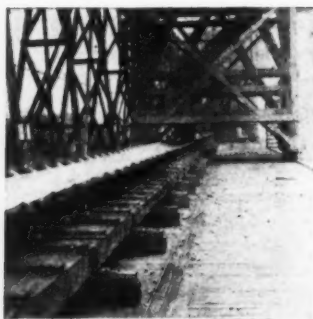




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Elevating Cotton-seed



Dock Conveyor for Coal

## Elevating and Conveying Machinery

**I**F you knew that one man with a wheelbarrow could move as much as four men could carry in their hands, you would buy a wheelbarrow and give three men another job.

Webster Equipment replaces many men with wheelbarrows, trucks or wagons. There are types of elevators and conveyors adaptable to any service—wherever material in bulk or packed is to be continuously moved from place to place.

*Suggestions and estimates on inquiry.*

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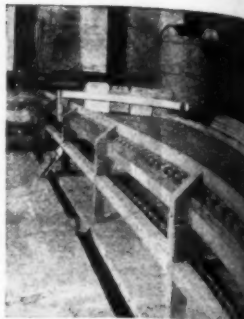
(212)

Tiffin, Ohio

New York



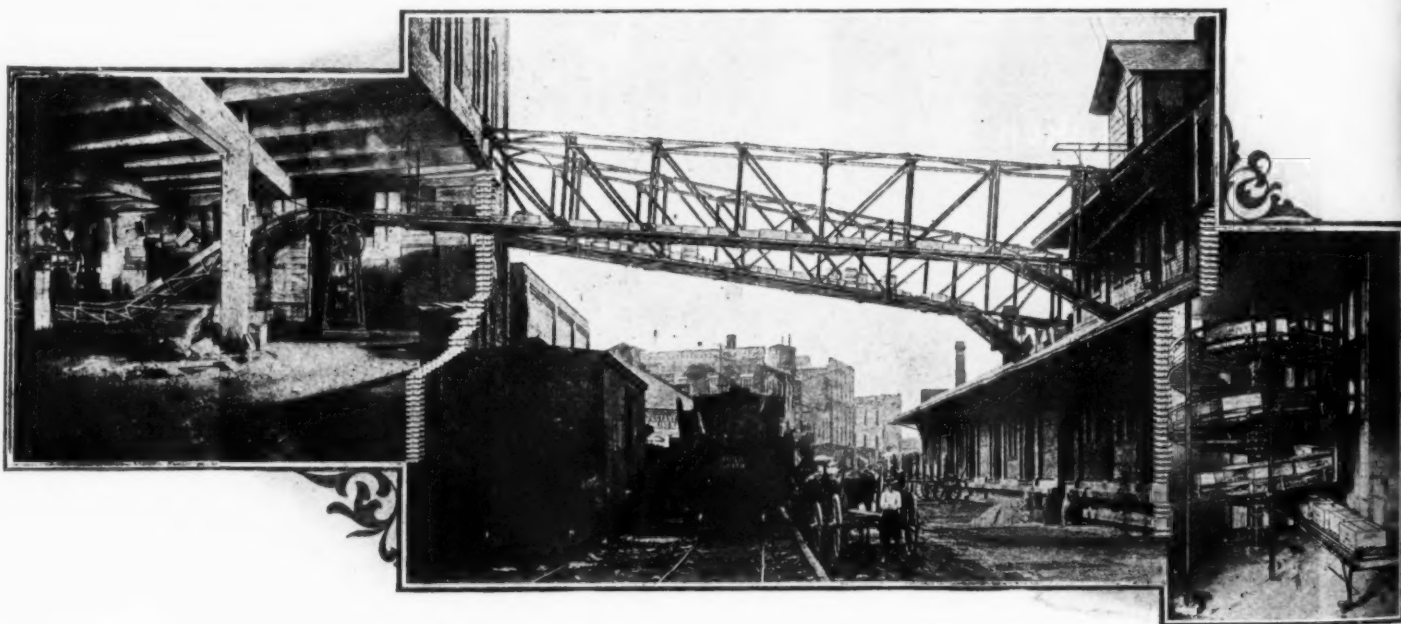
Conveying Sugar Pulp



Platform Conveyor for Cotton



Tray Elevator for Balm



## GRAVITY CONVEYERS



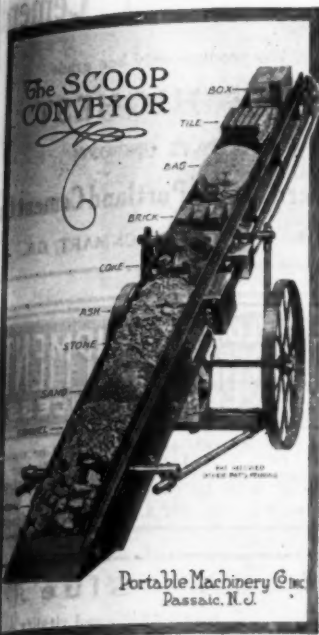
are solving the labor problem in hundreds of essential plants and many departments of the U. S. Government. They are releasing men for the Front and at the same time speeding up the production of Second Line material and Munitions.

They set the pace for the movement of your product and keep a steady stream of finished goods going to storage or shipment to fill the urgent demands of the War Contracts.

The resulting saving of labor, while secondary to you in your great effort to get things done, is sufficient to pay for the Conveyers in a surprisingly short time. Investigate today and let our experience be your guide to greater ease and speed of production right now.

ASK FOR BOOKLET No. 26

**The Alvey-Ferguson Company, Inc.**  
CINCINNATI



**WILL  
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WORK  
OF  
FROM  
6  
TO  
12  
MEN**

Hundreds of manufacturers are now using the Scoop Conveyor to load and unload cars, trucks and wagons and to stack into storage piles or bins.

Ask for further information

**PORTABLE MACHINERY CO., Inc.**  
PASSAIC, N. J.

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The Professional Ad. writer had the gall to write us and say that this is what our beautiful ads. are made of.

He wants us to hire him to do the thing in the way it ought to be done.

But we cannot afford it.

The time was when we used the Stately Stuff, the "Refined" Stuff, but in those days we simply advertised for the satisfaction of seeing our name in bold black type.

But that kind of advertising brought no business because it was lost in the crowd of ads. and nobody saw our stately cards nor read them if they did.

We then began to print the "Abominable Stuff" that shocks Professional Ad. Writers and folks who wear side whiskers and Professor Bluff and his friends.

And the old shop began to hum through good times and bad and is still at it.

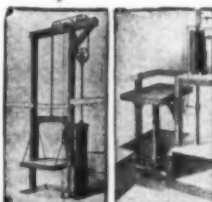
While 2000 and more concerns like these read our "Abominable Stuff"

Larkin Co. (Soap)  
Merrimac Chemical Co.  
Standard Oil Co.  
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Boston Woven Hose & Rubber Co.  
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Elevator in Large Soap Factory in Jersey City



Double Geared

Direct Acting

And shout from the house top

"Hook 'er to the Biler"

**The Ridgway & Son Co.**  
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Elevator Makers to Folks Who Know

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Passenger and Freight  
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**KIMBALL BROS. CO.**  
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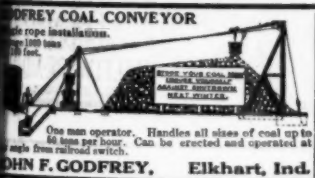
Gus Tallafero  
Oklahoma City, Okla.

## ELEVATORS MOFFATT MACHINERY MFG. CO.

HAND—BELT—ELECTRIC  
AND HYDRAULIC

MACHINISTS AND FOUNDERS  
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### We Make Freight ELEVATORS

for hand, belt and electric service that have stood the test of 25 years' service.

Let us tell you more about them.

**DUMBWAITERS  
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### FREIGHT ELEVATORS

**ELECTRIC  
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Dumbwaiters  
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Guide Lubricators  
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Write for circulars  
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Owen T. Snyder  
Company  
Columbus, Ohio

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Price \$6.50 a year, six months for \$3.50.

### You Get the Speed, Lift and Endurance

WITH

## WRIGHT High Speed Chain Hoists



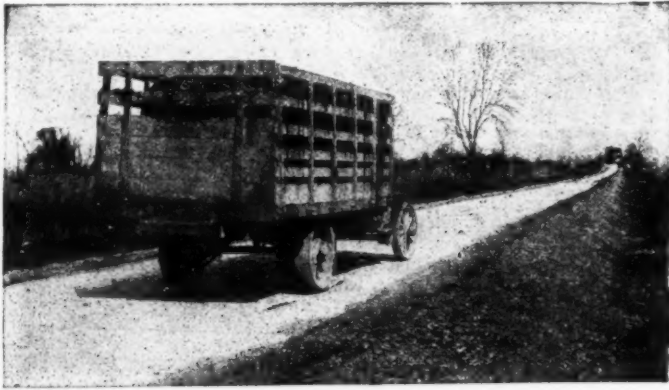
Loading Trucks at Annealing Ovens with Wright High Speed Hoist

They are doing first rate work in shops, foundries, factories and wherever a hoist can be used.

Catalogue R-16 is ready

**WRIGHT MFG. CO.**  
LISBON, OHIO





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And yet, simple as it may appear, it typifies at once the South's greatest need and greatest opportunity—the readjustment of the road surface to the new freight vehicle for the hauling of heavier loads with greater dispatch at reduced power cost and lessened wear on the road.

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Concrete  
Road  
Is  
Permanent**

— SAVES GASOLINE —

— CONNECTS  
FARM WITH CITY —

— NO MUD — NO DUST —

Write us for free copy  
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### CLINCHFIELD PORTLAND CEMENT

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Sets and stays in seams.

Has tenacity and vitality.

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Works at Madison, Ill. and Alton, Ill.



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Manufacturers of

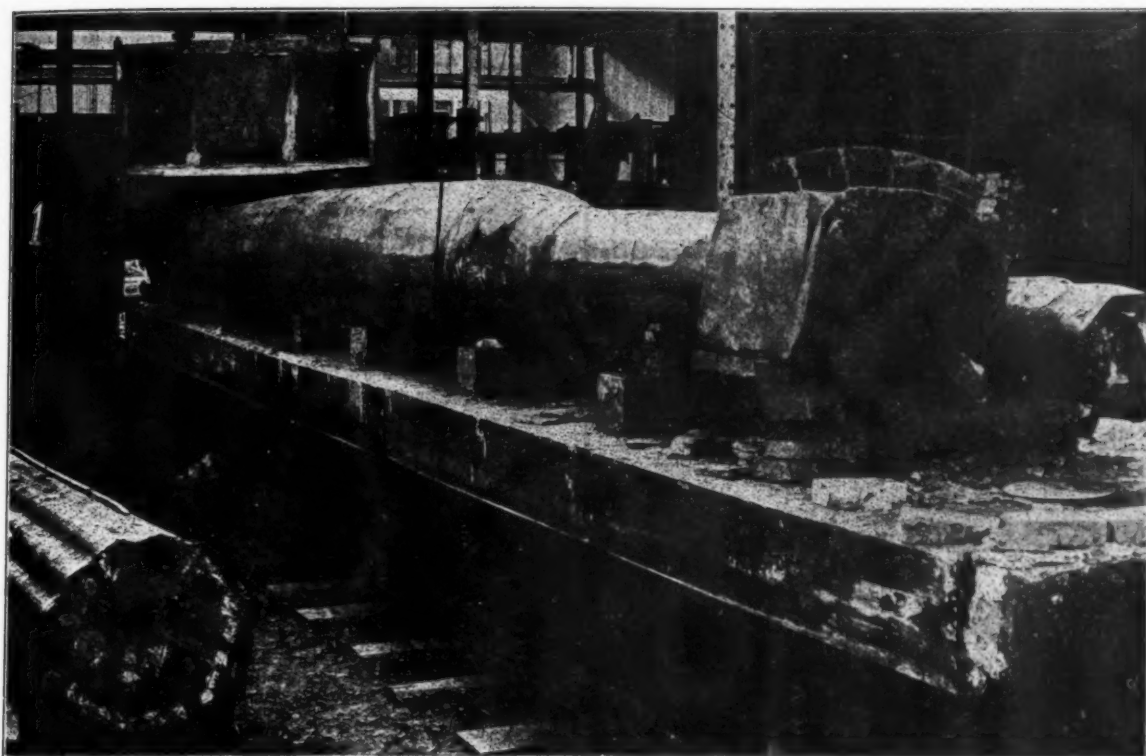
Bee-Hive and By-Product Coke, Coal Tar, Sulphate of Ammonia, Benzol, Toluol, Xylol, Light and Heavy Solvent Naptha, Napthalene, Ore, Washed Metal, Basic and Bessemer Pig Iron, Low Phosphorus Pig Iron, Forging and Re-Rolling Billets, Slabs, Sheet and Tin Bar, Blue Annealed, Black and Galvanized Sheets, Formed Roofing and Siding, Single and Double Pickled Sheets, Furniture, Automobile and Deep Drawing Stock, Etc.



August 29, 1918.]

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is a feature of their manufacture. Whether the  
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MANUFACTURERS OF  
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**GENERAL SUPPLIES**  
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for gears, pinions, shafts and other parts under severe strain in automobile work. These steels are usually in stock in our New York warehouses, ready for quick shipment. It will be to your great advantage to get in touch with Aborn on your next order for automobile steels.

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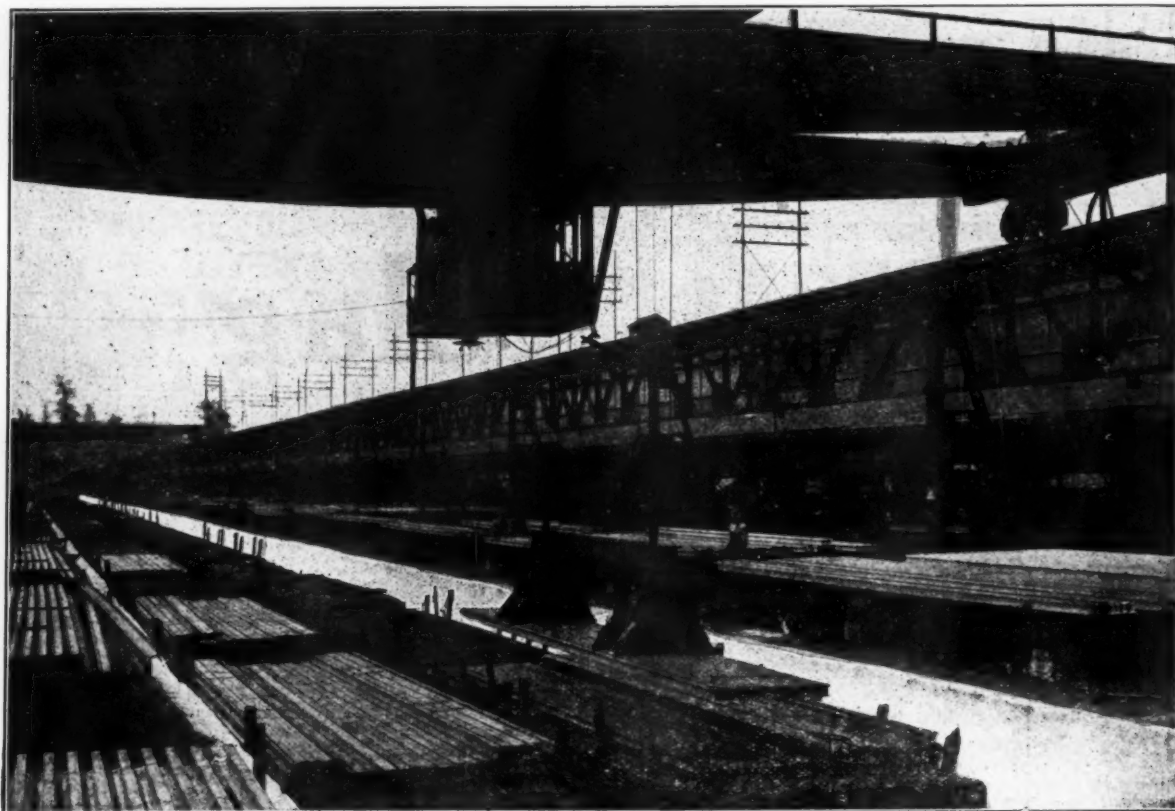
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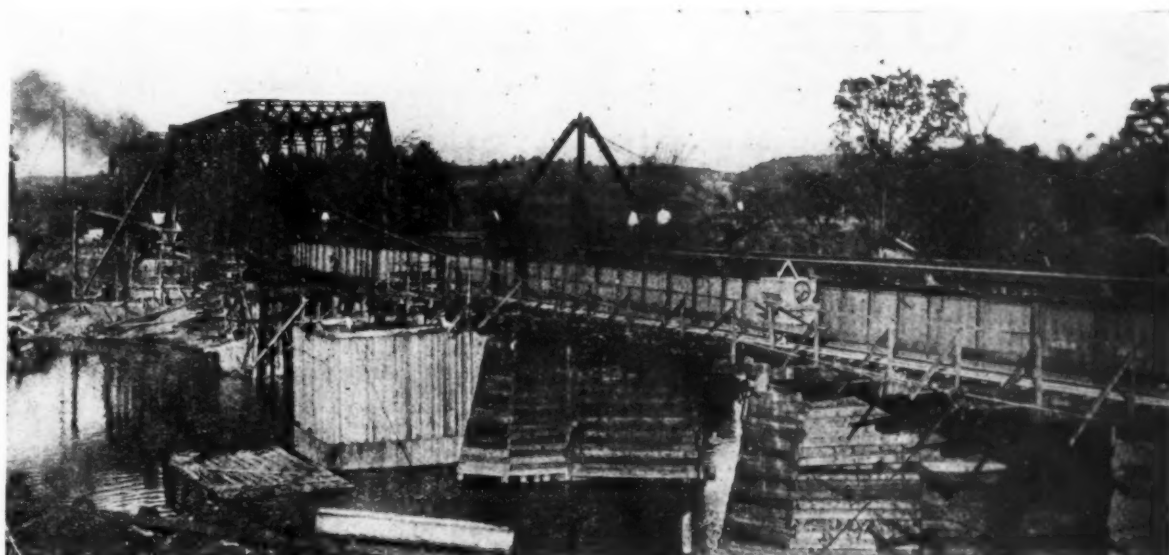
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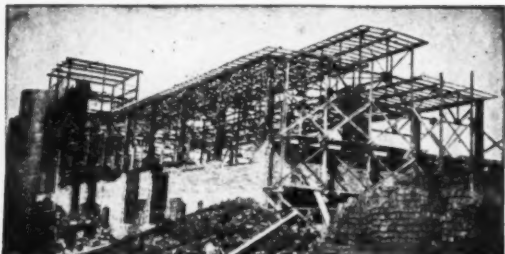
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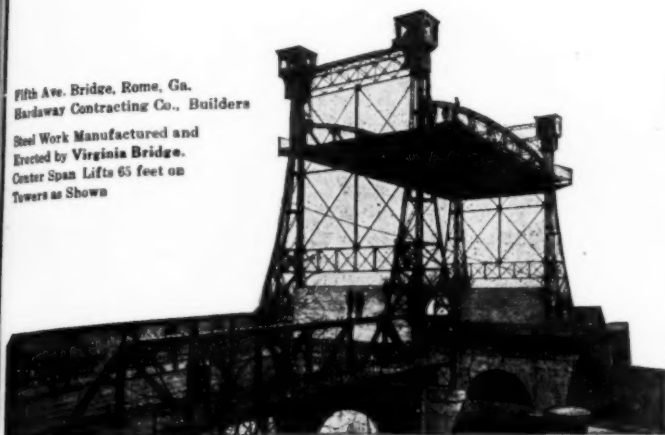
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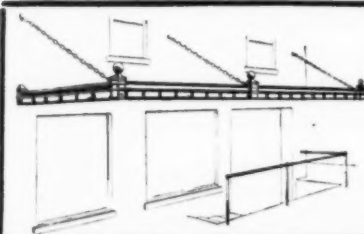
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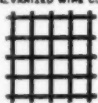


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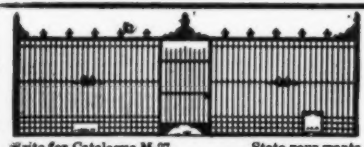


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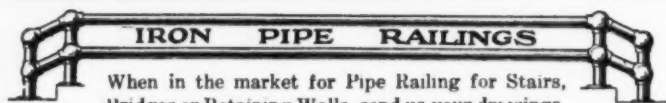
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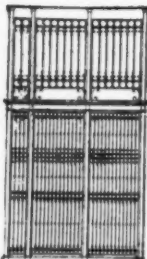
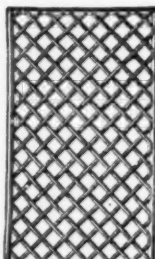
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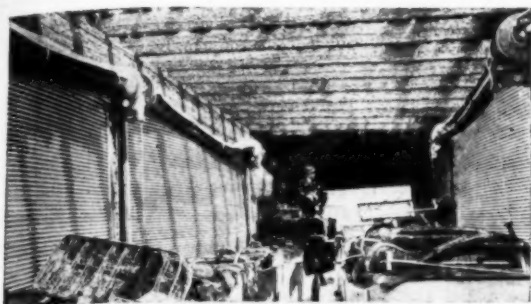
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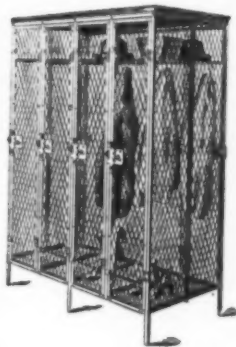
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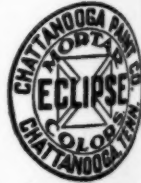


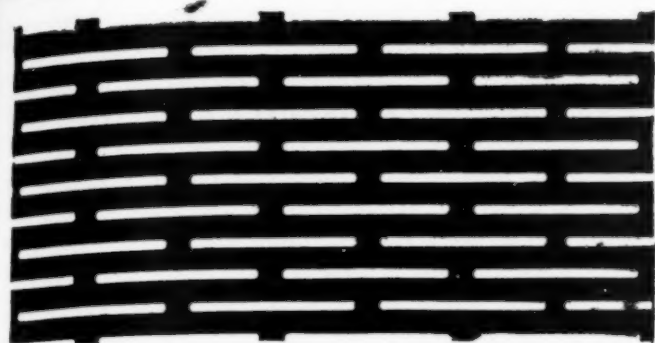
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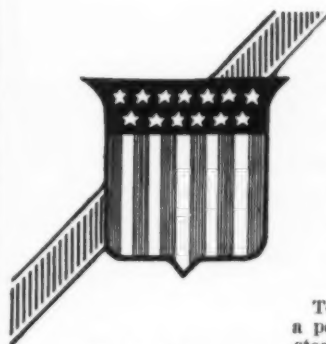
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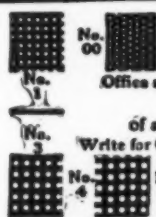
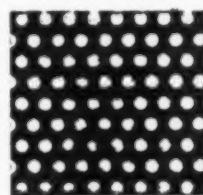
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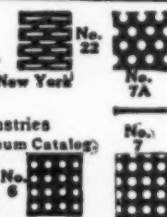
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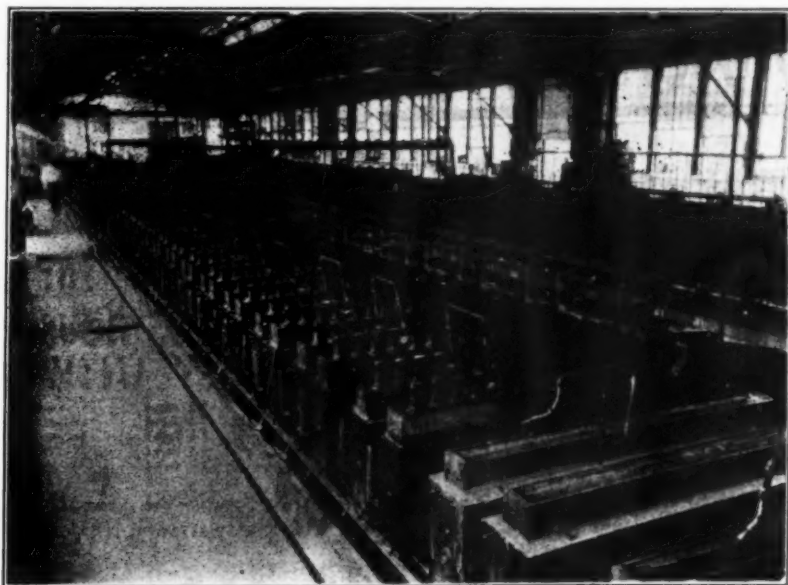
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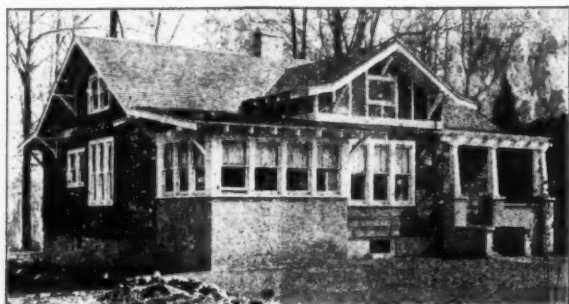
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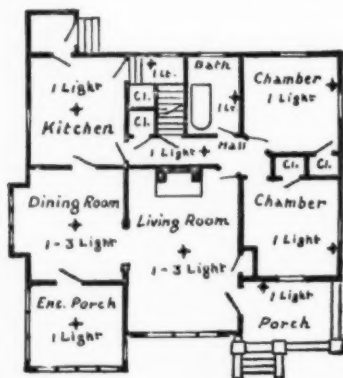
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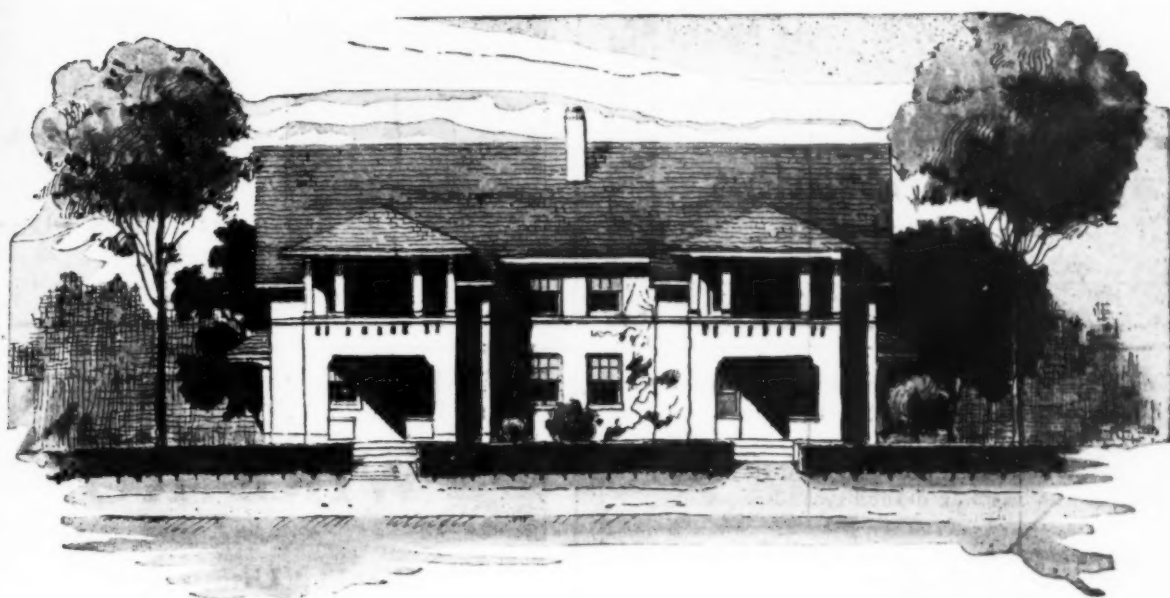
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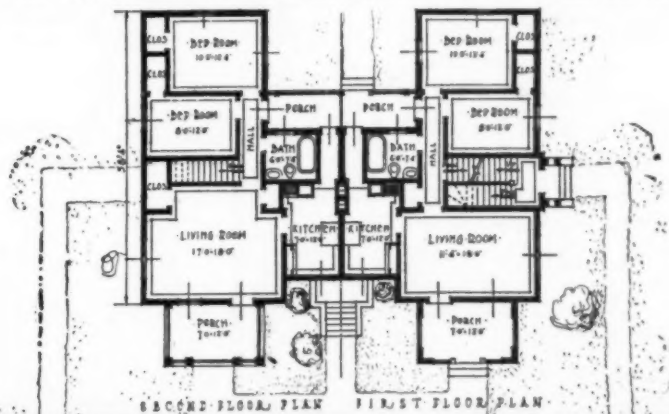
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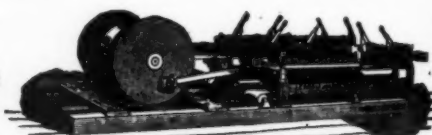
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Comptroller of the Currency.

Washington, D. C., August 14.

My Dear Mr. Edmonds:

I have your letter of the 25th ultimo, and thank you sincerely for favoring me with a set of the "War Eagle" Series.

I have not yet read all of these editorials, but I have read enough of them to realize that they ought to be potent influences in stirring the blood of everyone who is fortunate to have the opportunity of reading them. They deserve the widest distribution.

Sincerely yours,

(Signed) J. S. WILLIAMS.

Richard H. Edmonds, Esq.,  
Care the Manufacturers Record,  
Baltimore, Md.

Treasury Department,

Office of Commissioner of Internal Revenue.

Washington, D. C., August 19.

My Dear Mr. Edmonds:

I wish to thank you cordially for the set of War Eagle Series of editorials which you so kindly sent me.

It is inspiring to every true American to witness the growth in solidarity and strong citizenship which is being developed by journalists generally. Your contribution, through this set of editorials, typifying as it does your continuous service in publicity lines, is appreciated by the large number of readers of the MANUFACTURERS RECORD.

Sincerely yours,

DANIEL C. ROPER, Commissioner.

Mr. Richard H. Edmonds,  
Editor Manufacturers Record,  
Baltimore, Md.

## NOT WANTED.

A SUBSCRIBER to the MANUFACTURERS RECORD writes:

I believe that all Germans and Austrians who left this country to serve in the army and navy of our enemy and have fought against us should under no condition be allowed to return to this country after the war.

This goes without saying. The barriers against the admission into this country of men who having lived in America left this country to fight against it should be put up so high that not a single one of them should ever be able to land in America. Moreover, every alien enemy in this country who is found to be active in any work against America, or men who are now being interned for violation of our laws because of their co-operation with Germany and their efforts to circumvent America's work, should be sent out of this country at the first opportunity and never again be permitted to enter for any purpose whatsoever.

We want no men of that kind to curse this land with their presence again.

## Potash Potentialities in America Which If Utilized Would Make Us Independent of Germany.

(COPY.)

Atlantic City, N. J., August 22.

Hon. Woodrow Wilson,  
President of the United States,  
Washington, D. C.

My Dear Mr. President:

In holding what it believes to be a monopoly of the world's potash supply, Germany expects to be able to dictate terms of peace and of after-war trade, based in part upon this supposed potash monopoly. Its public men have proclaimed that it will be within the power of Germany to say what countries shall flourish agriculturally and which ones shall die, according as to whether it permits them to have potash or withholds potash from them.

About 20 years ago Mr. Edward Atkinson, the far-seeing political economist of Boston, wrote for the MANUFACTURERS RECORD an article on the need of potash, in which he pointed out the serious disadvantages under which we would labor in the event of a European war, which would cut off our supply of potash. In that article, Mr. Atkinson suggested that the man who discovered a new source of potash would render to this country a greater service than one who might discover a great gold field, or a new source of iron ore supply.

For many years the Government's experts and private experts have been engaged in seeking to find that much longed-for source of potash. It has now been found, but not in a way that was expected.

We have not found any great bed of potash from which we can draw our supplies, but we have found that potash can be produced as a by-product in the manufacture of Portland cement, in the making of pig iron and in a number of other industries. If Mr. Atkinson were living today he would doubtless rejoice more in the discovery of the utilization of these hitherto waste materials, as a source of potash, than if we had discovered a bed of potash as vast as that of Germany's, for he was an enthusiast in the utilization of waste materials.

A few years ago a Portland cement company in California found that it was feasible to save a considerable amount of potash as a by-product in the making of cement. A Maryland company sent experts to California and their investigations were so satisfactory that this company spent \$100,000 in putting up a by-product potash plant. This has now been in operation for several years and has been so successful in making potash that a large number of other cement companies are preparing to establish by-product potash plants in connection with cement making. It has

also been proven that potash can be recovered as a by-product in the manufacture of pig iron.

If every Portland cement plant and every pig iron furnace in the country could establish, in connection with their present plants, potash recovery systems, we would be able to make ourselves entirely independent forever of Germany's potash. In doing this we would give new impetus to all the agricultural interests of the country and fundamentally stimulate the production of foodstuffs.

In thus becoming absolutely independent of Germany's potash we would take from that country the power which it thinks it now holds to trade and barter in the final peace terms, with its potash as a dominant power.

We would be able to make ourselves wholly independent, as I have said, of German potash and forever establish an industry which would increase in proportion as we increased our output of cement and iron. The establishment of this industry on so large a scale would at the same time stimulate the utilization of the waste materials in other industries for potash production.

But there are difficulties in the way. A few days ago Secretary Lane, in a letter to Congressman Kitchin, pointed out that one cement plant which had expected to spend \$100,000 on the establishment of a potash by-product system had been unable to do so because the proposed Income Tax bill would make the margin of safety too narrow to justify the investment of new capital. Mr. Lane very strongly urged that in the creation of new industries of this kind they should be free from heavy taxation on profits until their net profits enabled them to amortize their capital thus invested. The suggestion is certainly a wise one.

It can hardly be expected that new capital will go into enterprises of this kind, taking the chances of the uncertainties of after-war conditions, unless there is some assurance that the capital thus invested can be amortized before heavy taxation is laid upon its earnings, or unless assurance can be given that industries such, for instance, as that of potash will after the war be protected against the inroads which Germany would seek to make by breaking down the market for American potash.

It is possible to bring about the development of a potash industry which would make us entirely independent of German potash, and thus take from Germany the club which it now holds over the agricultural world in the possession of vast potash resources. The



matter is one of such tremendous moment, involving our agricultural independence, our freedom from any power of the German potash monopoly, and our ability to make peace terms without for a moment having to consider German potash, that I feel justified in bringing this matter directly to your attention in this way.

If assurance could be given by you to all of the Portland cement makers and to the iron producers of the country that the establishment of by-product potash plants would have the heartiest encouragement by the Administration and would be regarded as vitally important to the United States now and hereafter, I am sure you would be rendering a service of inestimable value to all civilization.

It is quite possible that the Government itself should take hold of this potash development, and on some satisfactory basis establish by-product plants at all the Portland cement plants and all the iron furnaces, or at least at every furnace where the test of the raw materials shows that potash can be recovered as a by-product. In the aggregate, an immense amount of capital would be involved, but the Government could well afford to co-operate with individual concerns in establishing such plants on a basis which would be fair to the Government, fair to the owners of existing plants, and which would give to the farmers of America an abundant supply of potash and forever protect them and this country from the power of the German potash industry.

I trust that in thus presenting these matters to your personal consideration you will find them of sufficient importance to make a study of the almost limitless potentialities for good in these facts.

Very truly yours,

RICHARD H. EDMONDS.

#### PEACE WITHOUT PUNISHMENT IS AS FALSE AS THE FATHER OF LIES FROM WHOM IT EMANATES.

REFERRING to the fact that the Stone Printing & Manufacturing Co. of Roanoke, of which he is treasurer, is devoting its efforts very largely to war work, Mr. G. G. Gooch writes:

But we do not mind the work and we do not mind the money, and if some d— fool don't jump up and holler PEACE too soon, we will all be happy one of these days.

We shall have to be warned in time against the certainty that some pacifist fool or some pro-German will "holler peace" and seek to create the impression that peace without punishment is according to the teachings of the Bible, whereas it is as false as the father of lies from which it emanates.

It may be many years before we shall all be happy, for everyone of us will have to endure some of the suffering and sorrow which comes through this accursed war, except we may have that happiness which comes from knowing that we are doing our duty and that though we may give up loved ones we are giving them to the holiest cause to which men ever dedicated their lives.

Our great job today is to crush Germanism and to crush it so completely that the world shall not again have to do the job over, and thus make Germany to some extent pay for the sorrows which it has brought upon the world.

Millions have died and other millions will die because of Germany's murderous campaign for loot and conquest. False to these millions who have died for the salvation of the world, false to God and humanity, will be any man or woman who dares to suggest any thought of peace except a peace based on the overwhelming destruction of Germanism and all that Germanism represents.

On to Berlin!

#### GOOD ROADS ESSENTIAL IN WAR WORK.

IN reply to an inquiry recently sent out by the Highways Industries Association to the farmers of the country asking as to the need of good roads for the marketing of crops, one answer from Kansas is said to be typical of all. It states the case with absolute clearness. It is as follows:

Right at this minute it is raining hard, and has been raining alternately for several days, until every earth road in Kansas is impassable for loaded trucks or automobiles. We are conducting a State-wide campaign of education for hard roads, but the word comes that the Government will not permit road bonds to be sold. So we are in the position of being told to use trucks to help relieve the railroads and thus help win the war, and at the same time we have no truck roads and are not permitted to build them.

Since the beginning of the war the MANUFACTURERS RECORD has insisted that the building of highways as a war measure is a necessity for the early winning of the war. Increased farm production and ease of distribution of farm products cannot be attained except through the building of good roads and the larger use of motor trucks. Transportation by rail and by water is inadequate to take care of present conditions. Our railroads are overburdened and their facilities cannot be increased rapidly enough, even by the expenditure of billions of dollars, if that were put into them to meet the needs of the next few years.

Everything which increases the difficulty of holding laborers on the farm and of reducing the cost of handling stuff to and from the farm will lessen the power of the country to increase our food supply.

No longer can we depend upon the old slow method of horse-drawn vehicles and the shipment of farm products during the season when dry roads make it possible to pull through. The same intensity of action which is to be found in steel-making and ship-building and coal-mining must be given to the production and the marketing of foodstuffs. This is not feasible without good roads.

**The farmers of the country have never received their share of public recognition and of profit of business. They have been largely the burden-bearers and they have never been able to pay a rate of wages that gave a living chance to most of the farm laborers of the country. And yet upon the work of the farmers depends the salvation of the world.**

The farmers have been denounced for seeking fair prices for wheat and cotton and other products. These prices have not yet reached a point of profit to the grower or to the farm laborer at all commensurate with the profits which are being earned by the manufacturers and by mechanics. Every new factory established for the making of war materials, every great construction work started, will intensify the drain on the farms. The new draft law will also greatly lessen the number of men available for farm work. The greatest efficiency through the larger utilization of power machinery in the cultivation and marketing of crops can alone save the situation from disaster. And good highways and the largest use possible of tractor machinery and motor trucks for hauling stuff to and from the farms are vitally essential.

We do not at all underrate the shortage in men for the building of roads, nor the shortage in transportation for hauling road-building material in urging the building of highways. So far as the financial question is concerned, it is difficult to understand how those in authority can take so narrow a view of the financing of road-building enterprises as to discourage the sale of bonds issued for that purpose. If we were to continue our road-building work at the rate of \$200,000,000 to \$250,000,000 a year, as we had been doing before the war, the cost is a mere bagatelle as compared with the vastness of all of the financial operations which must go on. To halt this work because of the financial side of it or because of the demand for labor or of transportation facilities for handling road-building material would be almost as unwise and shortsighted as to halt the building

of locomotives and cars and the maintenance of road beds by the railroads.

Under the work of the Railroad Administration, about \$1,000,000,000 have been allotted for the expenditure of improving railroad facilities. The sum is inadequate, but probably it is as great as can be wisely expended at the moment, but the building of highways is relatively as important to the country as is the expenditure of this billion dollars for the railroads.

The Government is urging the larger use of motor trucks for the marketing of farm products, for the handling of mail, for lessening the strain on the railroads, and yet it is making it impossible for the country to carry out the Government's own advice by permitting existing roads to be destroyed for lack of maintenance and by halting the building of new roads. This decision of the Government, we are satisfied, has not one sound argument in its favor. It is fundamentally wrong, and sooner or later will have to be reversed; but in the meantime a vast amount of harm is being done, and we are by that act lessening the power of the country to fight, and we are tremendously lessening the ability of the farmers to meet the urgent and incessant call upon them for the production of a larger food supply.

In connection with the study of good roads, it would be interesting if at every cross-roads village throughout the country there could be posted in a conspicuous place a map entitled "Preparedness," issued by the National Highways Association, of which General Coleman du Pont is chairman of the Board of National Councillors and Mr. Charles Henry Davis is president. The entire country has been carefully mapped and an outline of roads, present and prospective, is shown, covering the whole country from the Atlantic to the Pacific and from Canada to Mexico.

The plan of this National Highways Association involves a scheme for the building by the National Government of an extensive system of national highways consisting of heavy traffic main trunk lines throughout the country. Through this system it is claimed that the States could without increasing their present appropriations build more miles of secondary highways than they can now do, thereby reaching out more fully into the farming districts.

With the general idea of the building of through highways by the National Government we are in hearty sympathy. It is no longer feasible to depend upon individual States to build the great national highways needed to meet transportation by the Federal Government of the vast amount of munitions and other war-making material which now moves, hampered as it is, over State roads and which is almost completely destroying State roads. These roads were built for the traffic prevailing a few years ago, but are entirely inadequate to the strain which is being put upon them now by the Federal Government.

We would like to see the big map which has been issued in the interest of this plan displayed conspicuously in every store in every country district, so that the farmers and others might for themselves see what the building of such a system of Federal highways would mean to the entire country.

In the meantime, however, individual States and counties should, we believe, be permitted by the National Government and indeed encouraged by it to go ahead in the issuing of bonds and the construction of such highways as will most strongly assist in the winning of the war through the betterment of the facilities for handling farm products and increasing the facilities of farmers who today are laboring under a greater stress than any other class of business people in the country, and who are getting less net results out of their work even at present prices of wheat and of cotton than are the manufacturers, the mechanics and the day laborers engaged in all the vast industrial activities of the country.

#### WHERE DO YOU STAND?

**He who gives himself up to the devil because he lacks the moral backbone and stamina to stand for the right would be saintly as compared with America if we yielded to Germany's wiles and granted her a peace without punishment.**

August 29, 1918.]

## We Are Not in This War From Any Spirit of Altruism.

"No people ever went to war in a more altruistic spirit," is a statement by Rev. J. B. Gambrell, one of the foremost religious leaders of the South, with which we decidedly take issue. Dr. Gambrell is wholly wrong. This country went to war from the selfish motive of saving itself from destruction; it went to war from exactly the same reason, and no other, that a man tries to shoot the murderer or the burglar and the outrager trying to break into his house and destroy his family. As long as he felt reasonably safe that the burglar and the murderer would confine their operations to the destruction of his neighbor's household, he selfishly said, "It does not concern me that my neighbor's family is being destroyed. Why should I risk my life, and possibly the prosperity which I am enjoying, by coming to the defense of my neighbor against the burglar and the murderer who are battering down the doors and shooting the wife and children of my neighbors?"

That was our position as a nation.

Oh, no; we did not go into this war from any altruistic motive, and against us history, with its cold and unerring decision, will record the fact that while our neighbors were being destroyed, while the greatest immorality in human history was running rampant, we stood aloof and said, "It is none of my business."

Belgium, the sublimely-heroic, was murdered, its cities were destroyed, and wherever the invading army marched it left the blackest record of crime known in all human history; but we wrapped the smug drapery of hypocrisy around us and said, "It is none of our business."

We did not even protest against Germany's black crimes. We gave—no, we did not give; he gave himself—the one man whose tremendous organizing power saved Belgium from starvation, but we individually and as a nation contributed only about \$30,000,000 of money to succor Belgium, while England and France, despite all their tremendous losses and fearful woe, contributed ten times as much.

Oh, no; there was no altruistic motive which moved us into war; not even the appalling agonies of Belgium; not even the inhuman crimes committed on that country; not even the gaunt, bony fingers stretched out by starving women and children, begging for help, moved us in the slightest, with any altruistic spirit, to come to the rescue of our neighbor, Belgium.

France, one of the sublimest figures in all human history, a nation which was civilized and Christianized and a leader hundreds of years—yes, a thousand years or more—before America was discovered; France, whose matchless heroism since 1914 has forever hallowed its very name, was being trampled to death. The friend who had befriended us in time of need, the friend who had saved us in the time of contest, the friend who had always honored and loved us, met a doom as great as that of Belgium. Millions of barbarians over its fair fields and in its glorious cities wrought ruin such as civilization had never known. They destroyed womanhood and childhood with the same gloating glee with which they destroyed cathedrals and churches and the very fruit trees of the land, and France, our old-time friend, must have stood aghast as it looked in vain for help from one it had helped in times past.

Well might France ask the question which a French officer put to Dr. Hillis, when he said: "How could America for two years leave the women and children of France in hell?"

England, the great civilizing and Christianizing

power of the world, under whose flag are found law and order wherever it floats, on land or on sea; England, the land of Shakespeare and Milton, and Bunyan, and Tennyson; the land dear to America by a thousand ties of kinship, threw into the great fight to save Belgium and France millions and millions of the very flower of its life; and the English army, like the armies of France and Belgium and Italy, and the English battle fleet stood between us and the hell of German domination, and we as a nation hid behind those armies and that battle fleet and saved our own precious hides.

Oh, no; it was no altruistic sentiment which sent us into the war.

Not until we definitely learned that England and France could no longer stay the onrush of barbarism, not until we knew that those who had sacrificed millions of lives and billions of treasure to save civilization could hold out no longer without help, and not until we knew that their downfall meant the immediate overwhelming destruction of this country, did we as a nation enter the war.

Altruism? Let us forever hide our heads in shame that we had no altruism; that we stayed out of the war just as long as we possibly could do so without being destroyed, and that when we entered it we entered it only because we knew that our destruction was in the near future unless on the battlefields of Europe we could help those who had fought for three years to keep on fighting and save ourselves.

We did not enter the war to save Belgium nor to save England nor to save France nor to save Italy. They fought on in vain, and we looked on with a complacency which should cause every honest-hearted American to mourn that as individuals and as a nation we heard not the call of God, and we moved not from any altruistic spirit.

If Germany had not attacked us, if it had not sunk our ships and murdered our people, if it had left us absolutely unharmed, would we have gone to war in a spirit of altruism to save England and France and Italy and Belgium? Not a bit of it, and every man who talks about our altruism knows it.

We said that we were not our brother's keeper, and we gloried in the campaign slogan "He kept us out of war." Did that indicate any altruism? Did it not prove that our supreme aim was to keep from bearing our just burden of war for civilization and that not altruism but love of peace and prosperity was our guiding motive?

Altruism! When a man sees his neighbor's family murdered without going to their rescue and then when the murderers and outragers turn on his family and throw some of his children to the sharks, outrage others and try to murder his wife, is it altruism that makes him fight when thus forced into a corner? There is just as much altruism in our being in this war as there would be in the man who finally roused himself against the murderers and outragers of his own family.

The man who proclaims that we are in this war from any spirit of altruism is misleading the country by creating an absolutely erroneous impression which tells us to pat ourselves on our back and say what a splendid altruistic, unselfish spirit we have when we should bow our heads in shame that we had no altruism.

We are fighting a war for self-preservation, a war against the murderers of our own people, a war against a nation of murderers and looters who sought to stir up Mexico and Japan to fight us, whose spies blew up our factories, killed our people,

bought newspapers for the purpose of upholding their crimes, lied to our Government, sought to stir up race riots here and to conquer America by the power of money, of pro-German deviltries in one form or another, seduced men and women from paths of rectitude to become Germany's willing tools to fill the land with lies against our nation.

This is a war for self-preservation pure and simple. Is it altruism that makes us seek to save our nation from destruction, our women and children from the bestial brute which would have gloated over our downfall ten times as much as over Belgium's?

Altruism! We had none of it in entering this war. It is a great mistake for our public men and our papers and preachers to try to create in the minds of the American people the belief that altruism moved us in this war. The doctrine is false. It is without a scintilla of foundation. It should make us ashamed that it should be uttered anywhere.

In the presence of our allies, who so gloriously for three long years endured the agony of fighting our battle, we should stand with uncovered heads and thank God that they had the courage and the manhood to fight, while we stood by and reaped enormous profits from selling to them foodstuffs and munitions at prices which were staggeringly profitable to our country.

It is our duty, and surely the duty of every public man, to confess the truth and to admit in honesty of heart that we considered peace and prosperity more to be desired than duty, and that we are not fighting in Europe today on any other ground whatever than that of our own individual salvation as a nation. Shame be it unto us for all time that in the hour of world agony we failed to heed the call of God to come up to His help against the mighty!

Let us be honestly frank in the matter, and then we shall the more fully understand why we are in the war, and we shall learn a lesson which we need to learn of why sacrifice must be made on an infinitely larger scale, in men and money, than would have been necessary if, in an altruistic spirit, we had stood by Belgium and France and England from the day when the barbarian horde broke loose, or certainly from the day when our own people were cold-bloodedly murdered by the sinking of the Lusitania.

"No people ever went to war in a more altruistic spirit" is wrong. It is erroneous teaching. It saps the moral stamina of the nation, and it praises ourselves when we do not deserve it. Rather should the word go forth from pulpit and from press and from public men that we stood aside as long as it was possible and that we permitted our neighbors to be murdered, unwilling to come to their rescue and assume our responsibility for the maintenance of civilization and Christianity throughout the earth. Then we would in a spirit of humility understand why we must now sacrifice as England and France and Belgium and Italy and Serbia have sacrificed in men and in money. Altruism? Away with such a thought!

## MORE FOOD MUST COME FROM THE SOUTH.

A BIG decline in the corn crop as compared with last year and the inevitable shortage in feed for livestock means continued high prices for corn and meats. The South is the only section which can save the nation and civilization from a steadily declining food supply, for the West cannot make any material increase in production. The responsibility is upon the South to increase its output of grain and meats in order to stand between famine on one side and our country and our Allies on the other. And the South will meet the issue.



## GERMANY PREPARING FOR WORLD TRADE AFTER THE WAR.

THAT Germany is hoping to regain control of the chemical and dye industry of the world at the close of the war, and that it is expecting once more to see its ships in every port of the world seem to be the inspiring motives of much that is done in Germany today for "after-the-war" commerce.

If this country and our Allies should leave Germany uncrushed and without the power for 50 years to regain the dominant power in world trade, if we did not forbid for a long period of years the importation of any German goods or the landing in America of any German ships, we would be faithless to the men who are dying to save us and to save civilization.

Reports are published in German papers which indicate that the Huns are preparing to make a vigorous contest for the ocean-carrying trade of the world. A big combination of the Hamburg-American Line, the Allgemeine Elektricitäts Gesellschaft and another large concern has been formed for the construction of steamships. The shipyards will be at Hamburg. Other reports say that another big shipyard will be established there in connection with the Rickmers Studien Company, Ltd., lately organized; also that the J. Jung shipyard, near Hamburg, has been bought by a syndicate which proposes to build large steamers. Forewarned is forearmed, and there should be care taken to see that there is no halt whatever in the shipbuilding program of this country, for there will be plenty of demand for ships when the war ceases and world demands for merchandise of all descriptions have to be supplied. This again reminds one of the probability that the German submarine war was inspired not only as a warlike policy, but because it would remove from competition merchant ships that were rivals of German vessels in the world's trade.

The same activity in shipping plans is noted in the development of the German chemical industry, and the German people are looking forward to the ability of the dye and chemical industry to force its way again into a dominant position in the world's trade. Some interesting facts in regard to the development of the German chemical industry in 1917 are given in Commerce Reports issued by the United States Government. The story is as follows:

The year 1917 was for the German chemical industry a period of intense activity, far-reaching achievement and profitable enterprise, says the Board of Trade Journal in quoting the German press. The tasks which the industry had to accomplish in the military and economic interests of the country alike continue to expand, with the result that works had to be enlarged and capital increased. All the concerns in the great chemical combine raised their capital toward the end of 1917, before the stringent regulations against capital increases came into force. The existing shareholders were given the option of taking up the new shares at 107 per cent., a figure which, in view of the high stock exchange quotations for chemical shares, allowed a good profit on the transaction. The seven companies in the combine raised their capital by 178,600,000 marks to 353,400,000 marks [at normal exchange the German mark is worth \$0.238 United States gold], partly with a view to the erection of new plant (especially for the extended production of nitrates) and partly also in order to water down their stock and check the rise of dividends.

During the year work was abundant and prices high; the profits were therefore good. But the profits shown in the balance sheets of the companies do not exhaust the whole of the gains. In addition to the visible profits there were also invisible profits in the form of sums partly written off and partly put to reserve, including considerable amounts set aside for the war-profits tax. It should also be noted that the output of the various members of the combine is not quite entirely pooled. For a certain fixed period the profits of certain branches of their work do not come into the general balance-sheet. Thus in the case of the Höchst concern the production of calcium carbide, nitrolin and certain products made therefrom, and in the case of the Badische Anilin group the production of synthetic ammonia and the inorganic nitrates made from it are so excluded.

For the six companies surveyed by the Frankfurter Zeitung (Hochst, Badische, Anilin, Bayer, A.-G. für Anilinfabrikation, Griesheim and Weiler-ter-Meer) the gross profits for 1917 were 194,900,000 marks, being 41,400,000 marks in excess of those for 1916. The amounts written off totaled 63,400,000 marks, showing an increase of 18,300,000 marks over the figure for 1916. The Frankfurter Zeitung observes that doubtless

further considerable sums must have been written off which do not appear in the balance-sheets. The German chemical works have always adopted the policy of making ample provision under this head; in fact, it is to this policy that their great strength is due. During the war they have continued this course, taking into account on the one hand the depreciation of plant resulting from intensive day and night work, and on the other hand the uncertainty of the future and the necessity of assuring a smooth transition to peace conditions. The net profits of the six concerns rose during 1917 by 14,000,000 marks to 110,000,000 marks; but as the capital involved had been increased, a lower dividend was declared for all the companies save one, which declared the same dividend as in the preceding year. The average dividend for 1917 was thus 18.78 per cent., as against 24.84 per cent. for 1916; the actual amount paid out in dividends was 63,100,000 marks, as against 53,070,000 marks.

These figures show that the chemical concerns have succeeded in financially consolidating themselves so thoroughly as to inspire confidence in a smooth transition to peace conditions. This confidence is all the more firmly founded in view of the agreement entered into between the chemical works and the explosives group for the purpose of defining their respective spheres of activity in the period after the war. While this agreement will eliminate competition at home, the German chemical industry will have to reckon with the determined efforts of the chemical industry in enemy countries to oust their German competitors from the world market. By way of comment on this point, the Frankfurter Zeitung only expresses the hope that the German chemical industry may emerge victorious from the struggle.

## THIS YEAR'S CORN CROP.

Columbia, Tenn., August 19.

Editor Manufacturers Record:

I am writing to make some inquiries as to the status of the corn crop, and am taking the liberty of asking you what prospects are for a full crop this fall. Has the drouth cut the yield down? If so, to what extent? What States have suffered the most?

Would also like to know if you would venture to prophesy what the price of corn will open at?

Any general information will be greatly appreciated.

T. N. FIGUERS.

THE MANUFACTURERS RECORD does not undertake to prophesy as to the price of corn. It is not a prophet. All that we can say on the subject is that the very serious drouth and intense heat have combined to seriously curtail the expected yield as reported by the Department of Agriculture on the first of August. The deterioration since that date over a considerable portion of the Western and Southwestern corn belt has been very serious.

If the corn yield for this year exceeds 2,700,000,000 bushels, we shall be much gratified and somewhat surprised, though we think it quite probable that the estimate of the Department of Agriculture on the first of September will hardly be quite as low as that. Whatever the yield may be, it will be wholly inadequate to our needs, and we reiterate what we have been saying for the last three years, that the decrease in the food supply of this country and of the world is assuming alarming proportions.

## LESSONS WE CAN LEARN FROM CANADA

NO one can study the way in which Canada has handled the war situation without being amazed at its vigor and activity in war as well as in business.

While we are discouraging tourist travel in this country on account of war and discouraging railroad, industrial and agricultural operations looking to the development of that territory, Canada is pursuing the opposite course.

We recently called attention to the widespread advertising all over the United States of Canadian railroads setting forth the advantages of Canadian agricultural opportunities to induce farmers to emigrate from the United States to Canada. And now our attention has been called to comprehensive advertisements as "Canada, the Land for a Vacation," which are being published in leading daily papers of this country by the Union Bank of Canada. That bank, stating that the annual tourist travel of Canada amounts to \$50,000,000 or more, calls attention to some of the attractions of Canada as a tourist resort, this in connection with an offer of banking service to travelers in Canada.

We can learn many interesting facts as to war work and business work, and as to the way in which Canada is meeting the situation.

## AN EARTHLY HELL CLOSE BY.

THE Hun U-boats have already made a hell on earth on the coast of North Carolina, and the Star has already remarked that the terrible deed committed by the undersea assassin when it torpedoed the British tank steamer Mirlo off Hatteras brings the war with tragic realization to our very doors. The Star has said that the sinking of the Mirlo and the horrible death of about a dozen of her crew from being boiled in oil on waters lapped with burning gasoline was one of the most monstrous crimes committed during the piratical warfare of the Kaiser and his minions. If anything more were needed to make us realize this horror committed in North Carolina waters, the from the editorial columns of the Richmond Journal certainly will stimulate our conception:

"No more terrible story has reached these shores of German frightfulness than that told by the survivors of the British tanker Mirlo, torpedoed off Cape Hatteras last Friday afternoon by a German submarine. Of the crew of 51, 10 were engulfed in the burning sea, which for a radius of two miles about the sinking ship was a caldron of blazing oil. The Mirlo was sunk without warning, and practically all in two. Oil poured out of her gaping sides at a terrific rate. It caught fire from the first torpedo and became a veritable furnace, when the second one hit into it. According to the survivors, the ocean was a fire for two miles. The lifeboat in which the doomed 10 left the burning ship capsized as it struck the water. 'We heard piercing screams,' said Boatwain Donalds, 'but we could not help them. The fire was all around us.' For two hours the men fought their way through the fiery circle, sacrificing their clothing to beat off the flames, since the attempt to extinguish the blazing oil with water proved abortive. Several of the survivors who had been picked up were shot into the burning waves when the ship blew up, and some 50 feet to the boats through the blistering waves before they were taken in, terribly burned. It is a tale of unparalleled hardship. Most disturbing is to learn that after such fearful experiences the men were not given prompt aid and comfort. Suffering from burns and without sleep for two nights, their clothing in tatters, they complain that there was no accommodation for them at the Norfolk hotel to which they were taken. This, presumably, was a duty devolving upon the British consul at that port, and that he was derelict is inconceivable, in view of the circumstances. Tankers, barges, fishing boats—anything that is unarmed—is the target for the brave U-boat assassin. Information comes from Washington that the espionage is evident on the Atlantic Coast where the Hun sea-devils are operating and sinking ships without warning and sending non-combatants to their doom, and it is said to be certain that signals have been given along the coast to aid the devil-boats to do their hellish work. If so, those who are aiding and abetting such crimes as that committed on Diamond Shoals, as just as guilty as the conscienceless barbarians who first two torpedoes into a non-resisting cargo ship off the North Carolina coast last Friday. Of course, if the guilty of such violation of American territory are caught and convicted the penalty is death under all the rules of international warfare.

Some of the stories coming into Wilmington about the presence and exploits of the undersea assassin are so incredible that many people can't be made to conceive that some of the stories are actually true. To the diabolical destruction of the tank steamer Hatteras, together with the sinking of the Diamond Shoals lightship and the torpedoing of three ship just off Hatteras ought to be enough to make the most obtuse comprehend the fact that the shore part of North Carolina is one of the theaters of the war.

One of the most heinous of maritime crimes in all the history of the world has been staged at Hatteras where storm tragedies have occurred since the earliest days of American shipping. Storm and sea are not responsible to civilization for the enormous toll in lives that they have taken, but there is a Hun empire beyond the sea that must answer for the fiendish crime of roasting men alive in a floating hell off Hatteras-Wilmington (N. C.) Star.

"The tragic realization to our very doors" of this Hell-made war should not surprise us. We blindly shut our eyes for three years to scenes infinitely worse than this that our neighbors, England, France, Belgium, Italy, Serbia and Armenia, were enduring, and we refused to help save them. No wonder a French officer, in detailing to Dr. Newell Dwight Hillis some of the awful crimes committed by German officers as well as by privates upon the fallen young women of France and Belgium, said: "Doctors, how could America leave the women of France and Belgium in hell for three years?"

"Roasting men alive!" What matters that? What does physical torture or death mean to men as compared with the torture that is beyond all human words to express of the women who endured agonies for which they would a thousand times have gladly exchanged being "roasted alive."

Is America awakening at last?

August 29, 1918.]

## "The Greatest Single Menace in the Wide World Today."

"THE German school system is, in my opinion, the greatest single menace in the wide world today. It is impossible to see how the German mind can be changed as long as the school system remains what it is."

This is a striking statement in a letter to the MANUFACTURERS RECORD from Rev. W. J. McGlothlin, professor of church history in the Southern Baptist Theological Seminary of Louisville. Dr. McGlothlin can speak advisedly from personal knowledge because he studied at the University of Berlin for two years and holds its degree of doctor of philosophy. He is one of the foremost thinkers of the South, thoroughly familiar with the whole educational system of Germany and the peculiar influence which it has had upon shaping the mind of the German people. Indeed, this influence has spread beyond the people of Germany themselves, educated under the German system, to millions of people in this country born of German parents, who have imbibed directly or indirectly the teachings of the German schools. The subject has not received the attention which should have been given to it. We must recognize, as Dr. McGlothlin has suggested, the terrible menace to the world in the whole German school system.

Some months ago Dr. McGlothlin delivered an exceedingly interesting address upon the subject, which has now been put in leaflet form. In that address he broadly discussed the educational systems of church and of state and the adverse influence which in Germany has come from a complete and absolute domination of state educational work. For many years the MANUFACTURERS RECORD has insisted that denominational schools are an absolute necessity to the broad welfare of the nation, and that it was incumbent upon every denomination to maintain a strong educational system in order to secure a diversity of thought and work in the educational activities of the nation, which could not possibly be brought about if the entire educational work of the country became absorbed in the state-owned or public schools. The subject, however, had never been brought to our attention so forcibly as in the address of Dr. McGlothlin, showing how the gradual monopolistic absorption by the state in Germany has vitiated the entire educational system of that country and has produced the present German frame of mind which is largely responsible for the war. This does not mean that Dr. McGlothlin is at all opposed to state education, but that he sees the tremendous danger of a system of education when the state represents the entire educational influence and thus completely controls the teachers and the teaching. On this point he says:

"In Germany the inherent weakness and dangers of a state system are aggravated by the fact that it has monopolized practically all education, and the further tremendous fact that it is controlled and directed by a thoroughly autocratic government. The entire mind of Germany has been molded under the direction and control of a proud, egoistic and truculent ruling aristocracy. For, while the schools of each state are under the control of that state, the influence of Prussia, the largest and most efficient of the German states, is normative for all. The efficient Prussian system is imitated by the other states, and students pass freely and with full credits from one university to any other in the empire. Within each state the schools are controlled by a hierarchy of officials extending from the Kulturminister down to the smallest school in the realm. Local people have little influence on their management. Teachers are prepared in state schools, they are selected and licensed by the state, text-books are selected, examinations set, standards determined by the state. The grade attained in the state schools fixes one's position in later life very largely. The state determines the salary and conditions under which the teachers shall work and bestows its honors and emoluments on the basis of school work. A more efficient instrument for the molding of the national mind in accord with the wishes of the ruling classes can scarcely be conceived.

"And in estimating the influence of the German schools it must be remembered that compulsory education is a reality; that every child in the empire is

actually reached; that none can escape its influence if he would. All children that are mentally sound are compelled to attend school from six to fourteen, and during these impressionable years the hand of the state is never removed from them for a moment. Those that go on through gymnasium and university have larger freedom, but they, too, are drinking from fountains provided by the state all the way.

"Moreover, the freedom of which the German universities boast is in some respects a delusion. In those branches which in no way affect the interests and ideals of the German Government teachers are free, as in the sciences. And in theological faculties there is much larger liberty than in America, since systems of theology do not seriously disturb the social and political views of the ruling classes. But in politics, political history and related subjects German professors do not have the freedom which is assured to professors in American universities. All kinds of distinctions and preferments are dangled before the eyes of the ambitious young professors as rewards for a supple loyalty, while the certainty that all doors will be ruthlessly closed to the recalcitrant teacher acts as a powerful deterrent to manly independence. When these means fail to control the unruly professor, he may be displaced altogether. Some years ago a young professor was removed from the University of Berlin because he had joined the Socialist party. The point is that on questions affecting the state the professors practically take orders from the higher authorities.

"Other autocracies have controlled their people by keeping them in ignorance and economic inefficiency; the German autocracy controls by educating and making efficient. It has sought to make the mind of Germany and circumscribe its horizon till it thought and saw life as the Government wished. Nowhere else has this means of control been tried, and it must be admitted, I think, that the effort has been a striking success. The seriousness of the world's situation lies in the state of the German mind. We are fighting a state of mind. German resources in men and material are by no means inexhaustible; it is the German mind that makes peace seem so far away and likely to be so unstable when once it is concluded.

"Here is the point where the world's peace has been wrecked, and it would seem almost impossible to build it up until the German mind is changed. The German schools have succeeded in making the most egoistic, provincial, truculent and ruthless mind that the modern world has to show. Glorification of the state has become an obsession, a cult, a religion. The highest pretensions and the most loathsome actions of the Government have been justified, and even glorified in lecture-room and pulpit throughout the land. The world is face to face with the frightful fact that in Germany there are 80,000,000 of people whose minds are constantly formed by a school system that monopolizes education and is absolutely under the control of the ruthless ruling classes. Mankind faces no more sinister and menacing fact than this as it looks into the future. How can the world be safe for democracy or anything else as long as the German educational system remains what it is now?"

In his illuminating discussion of the German school system Dr. McGlothlin pointed out that "the process has been gradual since the days of the Reformation, when the church, denuded of its wealth, was unable to supply adequate educational facilities for all of the people. The ancient universities gradually lost their independence and came under the control of the state, while all new foundations for higher learning were made directly subject to the state from their origin. Thus by degrees the state built up a complete system of schools which has at length put all others out of business, until the culture of the entire nation is now in the hands of the state. Only in the realm of theological education is there a semblance of freedom, and that is mainly in the Catholic Church."

Germany was thus the first country to try an education which was exclusively a creature of the state and was forced upon all the people. The state system is a monopoly relieved from competition and

criticism from without. What the German mind is the state school system has made it, in so far as schools have formed that mind. In the light of this situation, Dr. McGlothlin emphasizes the necessity for the maintenance of denominational schools in order that there may be a diversity of educational thought and work and that the entire education of a nation may not be completely monopolized by the State. In this he is strongly commending the position which the MANUFACTURERS RECORD has often taken on the great need of the maintenance by every religious denomination of schools as a part of their religious work. With the growing power of the public school system in this country, definitely influenced often by politics and sometimes seriously by the work of the United States Commissioner of Education, who, by virtue of his very office, has a great weight in shaping the thought of the country, it becomes a matter of supreme importance that every religious organization or denomination shall recognize that its responsibility to civilization, as well as to its own religious teachings, demands the maintenance of denominational schools of every grade, from those for the lowest classes to those giving the broadest educational opportunities equal to any afforded by the state.

## A LESSON FOR AMERICA FROM DR. MCGLOTHLIN'S STUDY OF GERMAN EDUCATION.

SOME years ago, when the General Education Board was organized in this country, with an endowment by Mr. Rockefeller of over \$40,000,000, the MANUFACTURERS RECORD bitterly opposed its whole scheme. At that time we said that if all of the evils charged against all of the trusts by the greatest trust fighters in America were true, the danger to the country from the power of all the trusts in business even on such a basis as that would not be nearly so great as the menace to America in the work of the General Education Board, for the design of that Board was specifically for the purpose of controlling the educational work of this country. We might live through an era of absolute economic domination by trusts and still as a nation survive, but if the educational power of the country was dominated by one organization it would be impossible for the better life of the nation to live through such a condition; and in the light of what Professor McGlothlin so succinctly points out as the result of a state-owned system of education, when exclusively dominating all of the educational work of the country, it is possible to see the menace in the work of the General Education Board.

One of the officials of that Board had the effrontery to announce years ago that it was within the power of that organization to say what schools in America should live and what should die, because it could decide what schools it would help financially and what it would refuse to help.

It is not simply the power of this \$40,000,000 endowment, with the promise of still larger endowment, that can so largely affect education, but it is the fact that this endowment is only about one-fourth of the sum which, through its work, this Board controls. Its contributions are made to colleges and universities generally on the basis of offering one-third or one-fourth of a given sum, provided the balance is raised by the college. Thus, for instance, in the early stages of its campaign it offered to a leading college of North Carolina, a long-established denominational school, a paltry sum of \$37,500 provided the school would supplement this by raising \$112,500, and on this basis it required the trustees to pass a resolution framed by the Educational Board guaranteeing to the agents of the Board the right forever to inspect the books and the investments of the college, with the right to recall its \$37,500 if any of the endowment had been used for strictly theological education or contrary to the terms of the Board. This was in effect an irredeemable mortgage on the soul of the college.

It was along somewhat similar lines that the General Education Board made endowments to other colleges, but the publication by the MANUFACTURERS RECORD of the outrageous contract forced upon this North Carolina college, we have understood, caused a change in the form of contract entered into with other schools. Nevertheless, the power of the Gen-



eral Education Board has been so great that it has been able to hold over some colleges a club and to others it offers what is in effect a bribe.

It can easily be understood that when a college accepted a gift of this kind, and when it knew that every professor in the college was being carefully watched by the agents of the General Education Board, that that college and most of its professors would not dare to raise a voice against anything contrary to the views of the General Education Board. And thus, with \$40,000,000 in its hands and with a power equaling three or four times that, because it used this endowment merely as the basis to compel colleges to raise at least three times as much as it gave, it has a power in the educational work of America which is a menace to the education of the nation, for it can educate men to think along any particular line that it desires and by its power to promote or demote many of the educational leaders of the country it is able to tie their thinking and their working to its particular plan, whatever it may be.

Against such a vast scheme, greater in its influence for evil than all of the imaginary trust operations in economic life, the MANUFACTURERS RECORD for years stood almost alone in its fight. Even today great denominational leaders and educators are willing to put themselves in the position of beggars of charity from this organization, and in doing so they in effect put a mortgage upon the soul of their schools and upon their own power to take an independent stand as against any of the influences which might be urged by Mr. Rockefeller's General Education Board.

It may be said that there are not in evidence yet any greatly disastrous results from the system inaugurated by the General Education Board. But an answer might be given by saying that it was not for a great many years after the introduction of the monopolistic educational work of Germany in blinding every educational influence to the desires of the state that we came face to face with the tremendous menace which Dr. McGlothlin well says "is the greatest single menace in the wide world." But there are even now a good many signs which indicate the dangerous power of the General Education Board. Follow, if you will, the career of the men who at the very beginning became the ardent upholders of that organization, and you will find that one after another has been rapidly pushed forward into positions of power in education to which they are not entitled by any inherent or acquired ability.

By whose influence did Claxton, the vigorous denouncer of all who would force German language out of American schools, become United States Commissioner of Education?

Was it because of any imagined ability for such a position, or was it because of secret influences which placed him there? Consider for a moment the tremendous power for evil of this \$40,000,000 organization with its widespread influence and its ability to advance into prominence men who will chain themselves to its money chariot, and we can see that in the General Education Board there exists a power which might mold the whole educational life of America for evil.

#### SPREAD THE FACTS EVERYWHERE.

If your soul is stirred by the awful realities of Germany's barbarism as published from week to week in the Manufacturers Record, pass your copy on to others that those who are not subscribers may learn the fearful realities against which our nation is fighting. Let no single copy be wasted. Pass every copy on to someone else and urge them to send it on to others, that in every home the story as given in every issue of what this war means to every man, woman and child in this and in every other land may be fully understood. Not until then will our nation awake. You can help in this way to win the war.

### HALTING THE DEVELOPMENT OF WAR-WINNING RESOURCES.

New Orleans, La., August 13.

Editor Manufacturers Record:

With reference to the movement to have the United States Railway Administration continue its agricultural development work, you may be interested in the enclosed letter from the New Orleans Association of Commerce, which is taking a strong stand in favor of agricultural development. I have also brought this matter before the New Orleans Rotary Club, and have every reason to believe that favorable action will be taken by that party at a business meeting tomorrow night.

Following is the Association of Commerce letter:

The executive committee of the board of directors, at their meeting yesterday, adopted the following resolution: It is the sense of the committee that the agricultural extension work heretofore carried on by the Federal Government, by the State governments and by the railroads should be sustained, and that the Railroad Administration be advised that it is the opinion of the Association of Commerce that the railroads, while under the control of the Federal Government, should not be stopped from promoting agricultural development along their lines.

This action resulted from your letter on the subject. The Association of Commerce will now, in every way that it can, encourage and promote the sustained work of the railroads, the Federal Government and the State governments in the promotion of agricultural development. In this connection we would be very glad to have your assistance.

Yours truly,  
(Signed) WALTER PARKER,  
General Manager.

Trusting that you may find this of interest, I am,  
Yours truly,  
S. F. MORSE.

The foregoing letter from Mr. S. F. Morse, consulting agricultural expert of New Orleans, is interesting and the action taken by the New Orleans Association of Commerce in behalf of continued activity by Southern railroads in favor of agricultural development is important. But this action does not go far enough.

It is as important that the industrial development work of Southern railroads should be continued as it is that agricultural activities should be resumed and carried forward with vigor. Potentialities in Southern agriculture are more generally understood than the potentialities in Southern mineral and industrial resources. That the South can tremendously aid in the winning of the war by increasing its food supply is universally known, but that the war could not possibly be won nor could it be carried on without the utilization of Southern raw materials is not so fully understood.

Upon the South the country depends for 99 per cent. of its sulphur, which enters into all the ramifications of the nation's business and in the making of munitions.

Upon the South the nation depends for 60 per cent. or more of its oil.

Upon the South the nation depends for all of its cotton, and without cotton the development of the explosive-making power of the country would be halted.

But there are, in addition to these well-known facts, raw materials in almost limitless variety and extent which can be used to the advantage of the nation in the winning of the war.

The railroads' industrial departments were more thoroughly in touch with these resources than anyone else. They were in a position to bring these resources to the attention of manufacturers and capitalists and mining operators. In the discontinuance of the work of the railroad industrial departments the Railroad Administration has made a mistake, for no department of governmental work can possibly do what the industrial departments of Southern railroads were doing toward the utilization of these resources.

The great mistake made in discontinuing the industrial departments of Southern railroads is strikingly shown in the inability of these roads to carry out their plans for exhibits for the Fourth National Exhibition of Chemical Industries, to be held at New York in September. This exposition is planned on a larger scale than ever before. It will show some of the marvels wrought by the chemists of the country through the utilization of raw materials. But the South, which made such splendid exhibits last year through the industrial departments of Southern

railroads, is this year shut out from that privilege. Canadian railroads will be largely represented by attractive exhibits to show the industrial and chemical-making resources of Canada, but the South by the action of the Railroad Administration is denied the privilege of showing what it could do toward providing the raw materials for the making of the things needed for the winning of the war.

In taking this action the Railroad Administration has given a hard blow to the utilization of the vast potentialities of the South in chemistry and in every line of manufacturing for the production of things needed in the war.

The Association of Commerce of New Orleans has done well in its action in behalf of continued agricultural development by Southern railroads, but the organization and every other commercial body in the South and Southwest should make a vigorous campaign in behalf of the industrial development, as well as of the agricultural development of the South and Southwest by a continuation of agricultural and industrial departments by Southern railroads and their full financial backing by the Railroad Administration. Until this is done and this work is resumed on a vigorous and aggressive scale the nation will be hampered by its failure to make the most of the great resources of the South for the production of war essentials.

**Peace with uncrushed, unrepentant Germany would be as great a crime as peace with Hell itself.**

### PASSENGER TRAVEL TO THE SOUTH THIS WINTER.

IN reply to a letter to Director-General McAdoo as to the feasibility of assuring adequate transportation facilities for travel to Southern resort sections this winter, we are in receipt of a letter from Mr. Gerrit Fort, Assistant Director. Writing under date of August 21, Mr. Fort says:

Replying to your letter of August 19, addressed to the Director-General of Railroads:

It would be unwise, if not impossible, to make any definite commitments at this time as to the character of passenger service that can be provided to Florida this winter. You will, of course, agree that the most important business of the railroads is to use their facilities in the movement of men and material necessary to the winning of the war, and it may be found that the passenger service furnished in past years cannot be provided, but so far as can now be foreseen, reasonably convenient service will be in effect, and it is the intention to grant reduced round-trip fares, somewhat higher than those of last year, but bearing about the same relation to the existing one-way fares as the former round-trip fares did to the one-way fares in effect before June 10.

The MANUFACTURERS RECORD did not have in mind especially the facilities for travel to Florida, but for the entire South. It raised the question as to whether the interests of the entire country could not be served and fuel saved by encouraging many thousands of families in the North and West to spend the winter in the warmer parts of the South where comparatively little fuel is needed.

Foremost, of course, above everything else, must be the utilization of the railroads of the country for war work, but it is gratifying to know that the Railroad Administration expects that reasonably convenient service will be in effect to Southern health resorts this winter. This, we believe, justifies the Southern resort hotels in preparing for full business this winter.

In order to prepare for an early movement of travelers to the South it would seem to be wise for Southern resort hotels to open much earlier than usual and to widely advertise that fact. The severe travel congestion in January and February could be largely obviated if those who intend to spend the winter South would start from their Northern and Western homes in November and early December. There are tens of thousands of families in the North and West who could to their own advantage and to the benefit of the nation spend their winters in the warmer sections of the South. In doing so they would conserve coal and benefit their health without in any way lessening any of the war-making activities of the country.

Go South early should be the order of the day for winter travelers.

August 29, 1918.]

## WE SHOULD NERVE OURSELVES FOR A LONG CONTEST.

LET us sing the long-meter Doxology, "Praise God from Whom All Blessings Flow," as we rejoice in battles won by England and France and America, but do not let us for one moment delude ourselves with the thought that we are in sight of victory. Germany is still unbeaten and can fight on for a long, long time.

We are making a mistake when our army officials so glibly promise a peace in 1919. For four years our Allies made similar mistakes, and from the false optimism thus created there came many hours of pessimism.

Under the blessing of Heaven, victory might come to us in 1919, but we do not believe that by that time Germany will be sufficiently beaten to admit defeat.

Every foot of ground from the battle line of today to Berlin will have to be won by hard and desperate fighting, and every new line of defense from the Rhine to Berlin will be defended by seemingly impregnable fortifications and by the desperate struggle of murderers who, knowing that defeat would mean death to Germanism, will fight unto death itself.

While glorying in what has been achieved, let us not for one moment think we are in sight of the end. Germany will do all in its power to create the impression that we can win in order to lessen our preparedness for fighting.

Even if Germany admitted defeat, don't believe her, for it is a nation of liars and will keep on lying to the end, and the only defeat we should recognize is when the flags of all the Allies in triumph float over the palaces of the whole "Potsdam gang" and over Vienna and Constantinople.

On to Berlin!

## SOLDIERS IN FRANCE WANT ROOSEVELT ACTIVE IN THE WAR.

CHARLES H. GRASTY, representative in Europe of the New York Times, is an out-and-out Democrat of the strongest kind. A dispatch from him to the Times to the effect that the soldiers want to see Roosevelt's great power more fully utilized cannot, therefore, be charged with any desire to favor Roosevelt except as Roosevelt represents a potentiality for the nation. In his dispatch from Paris just after returning from the battle front Mr. Grasty cabled, under date of August 26, as follows:

Senator Lodge's statement of our war aims expresses the sentiment of our officers and soldiers now in France. The general feeling in these circles is that unity and efficiency would be promoted by the Republicans adopting a strong policy and leadership.

At the front I heard many calls for Theodore Roosevelt's more active participation in war affairs. Men who are doing such work as falls to the lot of our soldiers need all the inspiration they can get, and no man is more capable of shaking the mind and heart of the soldier than Roosevelt. His red-blooded talk and his willingness to back it with personal sacrifices appeal to fighting men. There is nothing but admiration and loyalty for President Wilson, but our soldiers seem to feel that there is room enough for every one in this big war, and 90 per cent. of them would shout if they saw the Colonel take a more conspicuous seat on the band wagon.

Senator Lodge's pronouncement has been received here as indicating an accession of vital energy and strength to the Republicans without in any way weakening President Wilson's grip on the war management.

## OMITTED THE CHIEF ONE.

GERMAN statesmen who are continually raising the plea that Germany "has no friends," forget Germany has four friends—Lenine, Trotsky, Turkey and Bulgaria.—Huntington (Va. Va.) Herald-Dispatch.

And the Herald-Dispatch omits Germany's chief friend, the Ruler of Hell or Beelzebub, the father of lies.

## LET US DECLARE WAR UPON TURKEY AND BULGARIA.

THERE may be some imaginary diplomatic reasons which have kept us from declaring war upon Turkey and Bulgaria, but these two countries, the worst of Germany's tools, and guilty of crimes which match those of Germany itself, are as partners with Germany fighting against the United States.

It matters not whether their soldiers are on the battle line in France or not. These countries are fighting our Allies, and, therefore, they are fighting us. They are a part and parcel of the accursed activities which have turned this fair world into a literal hell.

Turkey has murdered millions of Armenians. Its crimes against the Christians of Armenia have surpassed in the number of deaths and rivaled in ferocity the crimes of Germany in France and Belgium, and yet diplomatically we are not at war with Turkey.

The Turks and the Bulgarians are fighting us because they are copartners with Germany and Austria in the war which they are making upon us. They are fighting us because they are part of the great campaign of barbarism against civilization, and we are enlisted upon the side of civilization.

It matters not what may be the so-called diplomatic reasons which are keeping us from declaring war upon Turkey and Bulgaria, we are weakening ourselves and our Allies by holding this position. It should be definitely known to all the world that we are at war with these two allies of Germany and Austria. The citizens of Turkey and Bulgaria in this country should be counted as alien enemies by us. Our warfare should include a distinct, definite warfare upon Turkey and Bulgaria. Any thought that by not declaring war upon them we may eventually win them from Germany and bring them to our side and our Allies in this fight is not worthy of the nation. We do not want any alliance, even if we could get it, with Turkey and Bulgaria. We do not want to bribe them into becoming our partners in this great struggle because as partners they would demand leniency in the final punishment which should be inflicted upon every enemy of civilization allied under the flag of Germany.

Turkey and Bulgaria should be made to pay the full penalty of their crimes. The Turks should be driven out of Europe, and while we are engaged in this gigantic struggle of crushing barbarism as expressed through Germany and its allies, there should be no hand of peace extended to any nation which, directly or indirectly, is allied with Germany against us and our Allies.

Let us declare war on Bulgaria and Turkey and join our Allies in a fight through the Balkans to drive the Turks out of Europe and thus to hit Germany at its most vulnerable point. It will be a long time before we can drive the German army back from the Rhine. It will be a long and bloody road before our flag can float in triumph over Berlin, and while we are making that fight Germany is rallying Bulgaria and Turkey and all the other forces of the Eastern country under its control to dominate the East. Germany could well afford to give up Belgium and France, to restore Alsace and Lorraine and even to pay a great indemnity if it could be left unmolested on the Eastern front, for, unbeaten and uncrushed on the East, Germany would be able to create a fighting power which would make certain another war in the not distant future, a war in which Germany would almost certainly be able to accomplish what it so nearly achieved in this war, and that is the domination of the world.

Our fight must enter the Eastern field of activities, and the sooner we get into the contest by declaring war on Bulgaria and Turkey the better.

Some months ago Hon. Oscar Straus, formerly Minister to Turkey, in an address before a great gathering in Philadelphia, speaking of what he personally knew as to the horrors of the war and the fearful destruction of Armenians by the Turks

through the co-operation of Germany, turned to his audience (he as our readers know being a Jew), and with tremendous force said:

It was left for Germany to teach the Turks new forms of atrocities in the killing of 800,000 Armenian Christians.

What Armenia has suffered was strikingly told by an Armenian graduate of Columbia University, who in a mass-meeting in New York a week ago said that Germany co-operated with Turkey in destroying Armenia because Armenia stood in the way of German advancement into the East. A part of his statement was as follows:

That the Turks, at the instigation of the Germans, have been largely successful is witnessed by the fact that of the 2,000,000 Armenians living in their native country at the beginning of the war only 750,000 are now alive, and of these, perhaps, 400,000 are children. It was the Kaiser who expressed his pride in being the protector of the Turks, and it was the Turks who slaughtered 55,000 Armenians in one day, who drowned 12,000 in the Black Sea, and who wiped out of existence all males between the ages of 16 and 60. They took the women and children from their homes and marched them through deserts until they dropped dead from exhaustion and starvation.

No one should be surprised at the atrocities of the "unspeakable Turk." It was the Turk who received that fearful arraignment many years ago by the great preacher, Rev. Joseph Parker, who in an agonizing, thrilling, terrific denunciation of the crimes of Turkey in those days against the Armenians, ended with the thrice repeated exclamation, "God damn the Turk; God damn the Turk; God damn the Turk!" Yet it was left for these people to learn new lessons of atrocity, new methods of criminality from the scientific murdering powers of Germany. Let it never be forgotten that it was not the military leaders, not the Kaiser, not the Junkers who alone are responsible for these crimes. The whole German nation has been a part and a parcel of the work. It was the German nation, with the Kaiser and all of his crowd of murderers, who committed these crimes, and the German people as a people must pay the penalty.

Any effort to draw any distinction between the German people and the rulers of Germany, other than that which the diplomats might seek to create for diplomatic reasons, would be fundamentally false.

Let us make war upon Turkey and Bulgaria and Austria with all possible vigor as we made war upon Germany itself.

## SHALL WE HATE GERMANS?

Well, that depends upon your definition of hate. Do you hate the blood-sucking tiger that kills your child?

Do you hate the rattlesnake that strikes its fangs into your wife?

Do you hate the murderer who kills your mother and the brute who outrages your daughter?

Is it hate that prompts you to kill such fiends in defense of your loved ones, or is it merely a determination to rid the world of them, knowing that in doing so you are protecting all humanity?

Germany embodies the blood lust of the tiger, the deadly fangs of the rattlesnake, the cruelty of the murderer and the beastly nature of the outrager—and into this war it has thrown all of these powers, guided by science prostituted to such vile ends.

Christ prayed for those who crucified Him, saying, "they know not what they do," but Germans know full well exactly what they are doing. They gloried in preparing for war, they gloried in its atrocities, and no one can ever pray for them on the ground that they did not know what they were doing. Any prayer for them must be on some other ground.



# STRIKING ILLUSTRATIONS OF HOW MOVING PICTURES, CHURCHES AND CHATAUQUAS ARE BEING MADE THE TOOLS OF GERMAN PROPAGANDA—LOOK OUT FOR SUCH DEVIL-DEvised WORK.

Joplin, Mo., August 17.

Editor Manufacturers Record:

Never was the wisdom of your vigorous campaign against pro-German propaganda more clearly demonstrated than in a neighboring city where I chanced to spend a quiet evening.

Dropping into a moving-picture show, there was seen a film put out by one of the leading studios, with the assistance of the United States Marines, purporting to tell the story of how a young man found religion in the trenches, thus finding the three greatest things in life—Faith, Hope and Charity.

Through it all runs an appeal for the German people. Realizing that the hope of a military decision in their favor has forever passed, they could ask for nothing more than such a picture as this cunningly hidden appeal to the sympathies of this country.

"The serpent was more subtle than any beast of the field." "And Satan came also and stood in the midst of them." Realizing the approach of the day of judgment, the Hun is "trying to hide the helmet in the cowl."

The churches must indeed watch, for they are the channels through which will come the aggressive suggestion for leniency.

The board of enemy psychology of the Wilhelmstrasse knows full well that a people that would sit idly by and watch the world ravished for three long years without raising a hand have not yet suffered enough to cause them to lose that desire for ease and comfort at any price and a hasty return to the flesh pots. And it is to this easy-going class that the appeal will first be made.

Another instance: At a Chautauqua in the Middle West, conducted by an orthodox church, there was given a widely-advertised lecture by a professor of one of the prominent colleges, a college that in times past served as a sort of a clearing-house for exchange of German professors. The lecturer told of his life in Germany, his knowledge of the various classes, and was very bitter in his denunciation of the military class, stating over and over that they must be beaten to their knees and not be allowed to dictate the terms of peace, etc.

The audience, which was a large one, imagined they were listening to a rabid anti-German speech, and so it may have been intended. And yet listen to this, the closing, a very touching story that sends them away with a thought of sympathy for the German people:

"A nurse maid with two children going through the ruins of Belgium stops for prayer as the Angelus tolls. Kneeling where they are they start the Lord's prayer; coming to 'give us this day our daily bread,' the children, having had nothing to eat for so long could not say it. The nurse bravely takes it up and says it for them. Then coming to 'forgive us our debts as we forgive our debtors,' the nurse having in mind all the atrocities could not say it and falters. A soldier by whom they had unconsciously knelt takes up the prayer and bravely says that portion. Looking up, they saw King Albert, and he says to them, 'that is the spirit we must have, a forgiving spirit.'"

And thus there was planted in the minds of the listeners an appeal for sympathy that will be openly made some of these days. It is against such as this that you are making the fight of your life, a fight that is even more vigorous than you made to awaken a people that were asleep, dreaming away the most precious hours in the history of the world, and your readers are working with you.

Verily—

"The devil was sick, the devil a monk would be;  
The devil was well, the devil a monk was he."

S. A. FONES.

The story of the nurse and children and the soldiers was born of the devil and was for the purpose

of creating a sickly sentimentalism against punishing the criminals. It is very much akin to that fake Doty story exposed in the MANUFACTURERS RECORD, and which has in the same way been used by several ministers and by many religious papers.

## BUSINESS WOMAN WANTED.

THE services of a serious-minded, well-educated young business woman are required by a thoroughly reliable corporation. Position permanent, salary not less than \$18 per week to start. She must be neat, refined, industrious, honest, have initiative, executive ability, be a good stenographer, rapid typist, accurate at figures and versed in diction. Give full particulars. All letters confidential. Position to be filled by September 1. —, New York.

The foregoing is a genuine advertisement in a New York daily.

The fellow who offers the fabulous sum of \$18 a week for such a mass of incompetence as is here specified deserves to go to jail for wild waste of money. He is an outlaw.

## A 16-Page Pamphlet

# Germany— The Super-Fiend

A Nation Gone Mad in Its  
Lust for Power and World  
Dominion.

A discussion of the Fallacious Doctrine that "Might Makes Right" and "As the State Can Do No Wrong, if the State Orders Crimes Committed, It Ceases to Be Crime."

With a view to bringing important articles and editorials bearing on the subject into handy form for distribution, the Manufacturers Record has republished in a single pamphlet the following:

"The German Nation's Brutality a Natural Product of German 'Kultur.'"

"The Degradation of Childhood and Womanhood by Germany."  
By Dr. Anna Howard Shaw.

"Confirmation of Thyssen's Damning Revelations of Germany's War of Murder for World Conquest."  
Including views of Otto H. Kahn, of Kuhn, Loeb & Co., and the revelations of Dr. Muehlton, former director of Krupp.

"Trying to Repeat in America the Ruin Wrought in Russia."

"We Must Fight the Blood Lust of the German Tiger Unto His Death."

"Time to Think Straight as Well as to Shoot Straight."

"A Slander on The Yellow Dog."

"The Fighting Eagle of America."

This pamphlet is one of the most important we have published. It discusses the German philosophy which led to Germany's barbarism and presents many other facts which should be made known to every American. It is of equal interest to men, women and children. Read it and distribute it to your friends and employees.

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## THE OUTLAWS—MEN IN CENTRAL EUROPE WHO BEAR THE CHIEF BURDEN OF GUILT.

WHEN, in the words of President Wilson, "this intolerable Thing of which the masters of Germany have shown us the ugly face," "Thing without conscience or honor, or capacity for covenanted peace," is finally crushed, will it not be necessary that the Allies should hold certain individuals among those masters personally responsible for the outrages and murders that they have directly willed and caused?

A devilish lust for power on the part of a few leaders among the Central Powers deliberately thrust the world into the horrible choice of slavery or death. I propose that public attention should be focused upon these criminals. They are the authors of the devastations of Serbia, Poland, Belgium and Northern France, and of the brutal slaughter of multitudes of unoffending non-combatants in those countries. They are the murderers of Edith Cavell and Captain Fryatt, and of more than a million of helpless Armenians and Syrians. They are the instigators of ruthless submarine warfare. They are the assassins of men, women and babies upon the Lusitania and of the people of Louvain, Dinant and other Belgian towns.

Let public opinion agree upon a list of these outlaws of civilization and insist that, as one of the conditions of final peace, these men must, if still living, be rendered to undergo such condign punishment as they deserve.

I suggest that this indictment for capital crimes against civilization should include the following names:

Count Tisza, Emperor William and Crown Prince Frederick William, authors of the attack on Serbia; Generals von Falkenhayn and Ludendorff, leaders with the Crown Prince, of the Prussian military caste; Admiral von Tirpitz, apostle of ruthless submarine warfare; Enver Pasha and Talaat Pasha, authors of the Armenian massacres; Djernal Pasha, murderer of Syrians.

Perhaps some other names, such as Ambassador von Tschirchky, Ferdinand of Bulgaria, Count Reventlow and Generals von Bernhardt and von Hindenburg, might be included among the outlaws, but are not the nine persons named above rightly selected to stand at the bar as the worst enemies of humanity?—Charles E. Levermore in New York Times.

Mr. Levermore's statement is good as far as it goes, but the list of criminals to suffer death should include many more than he has named. Every man who has been a leader in this campaign of murder should suffer the penalty of death inflicted upon individual murderers, especially when their crimes have been unusually heinous.

Neurotic sympathy for the individual murderer or rapist is no more out of place than neurotic sympathy for these royal murderers and rapists. Indeed, their crime is all the blacker because they entered upon their murdering campaign with a full realization of the horrors of war, and they entered upon it purely for the purpose of conquering, looting and enslaving the world. They glorified war, they glorified "friggfulness" and proclaimed it as a justifiable means for conquering their enemies, and now, when civilization is breaking their death grapple from its throat, they talk about a diplomatic peace, about a peace in which they will dictate terms, a peace which will give them control of raw materials and of world trade opportunities!

The only peace these criminals should ever know is the firing squad or as the noose of the gallows closes around their throats.

PEACE! Go ask the millions who have been murdered, the tens of millions who have lost their loved ones, the millions of blind and maimed, the women who have suffered at the hands of the brutes, and then ask of Almighty God what shall the answer be.

Perhaps we may read it in the words of Him who spake as never man spake when He said:

Ye serpents, ye generation of vipers, how can ye escape the damnation of hell?

## MORE SULPHUR IN TEXAS.

A SOUTHERN banker familiar with sulphur developments writes the MANUFACTURERS RECORD:

The woods in Texas are full of sulphur companies now, but very few of them are going to "come through." The Texas Gulf is one of them, however, and it will pay you to watch it, for there will be interesting developments from time to time. The acreage of that mound is comparatively small, but rich in sulphur, and it is owned by numbers of different interests. It is possible to define their holdings on the surface, but impossible to define the sulphur body below the surface, and when production begins then look out, for the interesting developments referred to above will take place.

August 29, 1918.]

## WHICH SHALL DIE—GERMANISM OR CIVILIZATION?

AMONG the leaders in financial operations and in religious work in Baltimore no one stands higher than John T. Stone, president of the Maryland Casualty Co. Mr. Stone has a son, Captain Harvey B. Stone, who is now in France with the Johns Hopkins Hospital Unit, and whatever Captain Stone writes in regard to the conditions in Europe may be accepted as coming from a man trained to know the full value of the highest integrity and the greatest care in speech.

On this account some letters recently received by Captain Stone's father can be accepted as absolutely correct.

Writing under date of July 28 to his father, Captain Stone, after detailing some of the work of the American soldiers and the casualties among them as seen in the hospitals, said:

"I don't think I shall ever lose the sense of personal repulsion and condemnation for Germany and all things German, because of the ruin and disaster she has wrought."

"These Americans show the gross defects of a plebeian democratic environment. They have no respect for regiments whose traditions go back to Fred the alleged Great, and think no more of messing up the Crown Prince's pets than if they were just plain murdering, baby-killing Huns like the rest."

"The men are splendid patients, full of grit and only concerned about one thing—how soon they can get back to fight. They have seen at first hand some of the bestiality of the Germans, have talked with French civilians liberated from occupied territory, and know at first hand the unspeakable treatment they have received."

"As a result they are absolutely savage in their hatred of the Hun, and their one idea is to wipe off the face of the earth the blot on humanity that the Hun has become."

"If they die in the attempt they are quite satisfied. Indeed, the attitude of many of them reminds one of the descriptions of old crusades and holy wars. They are largely fatalistic and in an unorthodox but sincere way religious at bottom. They feel that they have a job to do for the good of mankind, and they regard a life given in such service as well spent. Of course, they don't put it in any such terms. They just say, 'We came over here to stop that gang, and if we get put out doing it, what's the difference?'"

In describing the work of the American soldiers, their splendid morale and their fighting ability, Captain Stone writes:

"It renews and exalts one's confidence in our people, our nation and our ideals."

In complete harmony with the statement of Captain Stone in regard to Hun atrocities was an address made in Philadelphia last week by Dr. Thomas Travis, a Y. M. C. A. worker, who had just returned from France. In telling about the situation in Europe as he had personally seen it Dr. Travis pictured a degree of atrocity in the warfare of the Huns equalling anything which has ever been said of that nation. Here is an extract from this Y. M. C. A. worker's address:

"When I went over I had a feeling that the Germans could not possibly be guilty of all they were accused of, but I am back here to tell you that they have done even worse things than you ever read about. And I have seen the victims with my own eyes. When we got into Neuve-Eglise we found the 70-year-old village blacksmith tied to the anvil with his hand crushed by hammer strokes and his body mutilated from bayonet wounds, while the bestial Huns had tied a note to his body, saying that he would shoe no more horses for the Allies."

While I was in Armentieres, filled with 10,000 helpless refugees, the Germans one night dropped notices that they were going to shell the place, though they knew it was mainly crowded by defenseless war sufferers. At 2.30 in the morning the devils began to bomb the place, throwing enormous numbers of gas shells, and when it was all over they had gassed to death 3000 old men, women and children."

On another occasion a superior force of Germans were advancing to engage a small company of Belgians, and as they were coming on drove a large number of Belgian women ahead of their columns. The Belgian officer, exposing himself, signaled to the women to jump to one side, and a few did so, only to be shot down by the German officers in back of them. The others were kept in the places at the points of bayonets, and when the Huns finally got so close that they threatened to annihilate the Belgian force, the latter had to

shoot, killing their own women as well as many of the advancing enemy.

There are hundreds of other instances of Hun bestiality, such as their crucifixion of wounded Canadian soldiers who were not quite dead when reached by their own fellows. In one place a battalion of Germans were under a withering fire from the French, when they sent word that if the French did not cease firing they would kill a hundred French women held by them. The French had no choice than to continue to fire, whereupon these poor women were driven into sight of both enemy and friend, the Huns firing salvoes into their ranks, among which were six babies. Their bodies fell into a small stream, and those still living begged the Hun beasts for mercy for the kiddies. In answer those human devils bayoneted the remaining living and the babies."

It is with such a nation as this, as here outlined by Dr. Travis and by Captain Stone, that we are at war. We know that some people in this country have at times been inclined to question if it could be possible that any supposedly civilized nation had sunk into such barbarism as that charged against Germany. It has seemed incomprehensible, unbelievable to men who have loved womanhood and childhood to believe that a nation once accounted as composed of civilized men and women could gloat over such fearful crimes as those committed in Belgium and France and elsewhere where the plague of German Kultur has passed, but here are statements of men who have been there and seen for themselves.

Let us add to what these men have said a few facts given in an article published in the MANUFACTURERS RECORD last week and written by Mr. Paul Dana, for years one of the leading newspaper men of the country and son of Charles A. Dana, the great editor who made the New York Sun such a power in the world. In his letter to the New York Times republished by us last week Mr. Paul Dana made the following statements:

As for veritable atrocity, from what I have seen, coupled with what I have heard from others who have seen also, I imagine that when the full story is told it will be worse than the story generally known today. I read a few days ago that, after seeing the marks of Hunnishness along the path of the recent German defeat, some of our troops were more eager than ever to reach Berlin. I could wish that on their way they might pass through Dinant, which I frequently visited when stationed at Namur as a member of the American Commission for Relief in Belgium. However revolting the horrors described in the Bryce report, probably the most awful monument which the Germans have so far left in Belgium is in Dinant—the Dinant cemetery. There our men will see the 500 graves that bear the date of the Dinant massacre. They will see the spot up to which the long file of men, women and children were driven, there to have every fourth or fifth one pulled from the line and shot. The cemeteries at Taminies and at Andenne, giving similar testimony, are not far away. The Germans are not a people for Civilization to make agreement with, if that is humanly possible to avoid.

When we hear the suggestion which always emanates from pro-Germans, either those who are pro-German at heart or pro-German by the power of Germany's money, or from the so-called pacifists, which should be but another name for pro-Germans, too cowardly to admit that they are pro-Germans, we must recall to mind these atrocities of Germany and remember that we are fighting a nation which would gloat with unspeakable joy over committing even greater atrocities in America.

We can readily understand that as England and America have blocked Germany's game for conquering and looting the world, that England and America are the objects of Germany's bitterest hatred to an extent far greater than is France or Belgium. Therefore, the crimes committed by Germany in France and Belgium are merely indicative of the infinitely greater crimes if that nation of murderers and looters and outragers could break through the Western line, invade England and break through the English fleet and invade America.

Until the nation guilty of such crimes has been crushed and its power for evil scattered to the winds, until those who have led in these atrocities have with their lives paid the penalty for such criminal acts, and until Germany has been compelled to indemnify America and our Allies for every dollar expended in this war for saving civilization, no man should ever think of one word of peace for Germany.

This is a war to settle the question as to whether criminal Germany is to rule the world or

whether these black criminals, like individual criminals, are to be destroyed by the power of civilization. One or the other must die. Which shall it be? is the question which confronts America and our Allies.

## UNITED STATES CHAMBER OF COMMERCE COMPLAINS AGAINST FEDERAL TRADE BOARD.

Washington, Associated Press Dispatch, August 24.—Recent activities of the Federal Trade Commission in relation to big business interests have drawn an emphatic protest to President Wilson from the Chamber of Commerce of the United States. It was learned that the headquarters of the Chamber here has sent a letter to the President vigorously criticizing the Commission, and making suggestions, it is understood, for changes in personnel and methods.

The letter has not been made public either by the White House or the Chamber, and White House officials declined to discuss it in any way.

Bitter resentment against the Commission among some of the leading business interests was aroused by its report on profiteering, submitted to the President on the basis of Treasury income tax returns, as well as by the protracted investigation of the packing industry, culminating in a report denouncing the five great packing concerns as a monopoly, and recommending the Government assume complete control of the meat industry by taking over and operating stock yards and other facilities.

On July 4 the MANUFACTURERS RECORD published the following editorial, which antedated the very just complaint of the United States Chamber of Commerce against the socialistic tendencies of the Federal Trade Commission by seven weeks:

[FROM MANUFACTURERS RECORD OF JULY 4, 1918.]

## THE DENUNCIATION OF BUSINESS IS PRO-GERMAN IN EFFECT.

The ceaseless denunciation of business which emanates from Washington is doing the country more harm than all the pro-German devilry in the country. This denunciation is largely the work of the Federal Trade Commission, which once, under the chairmanship of Edward N. Hurley, was an honor to the nation, while now it is a dishonor. Then it was an upbuilding power; now it is more destructive than all the open pro-Germanism, and heading the nation straight for the chaos of Bolshevism.

If President Wilson would save the nation from chaos such as exists in Russia, his first step should be to abolish the Federal Trade Commission, or to sweep out of office the socialistic, anarchistic, mud-slinging, muck-raking element which now dominates it. If continued as now officered the Federal Trade Commission will bring more disaster to business, and thus to the nation, than did the Interstate Commerce Commission to the railroads and everything dependent upon them.

The possibilities of evil under the present operations of the Federal Trade Commission are too stupendous to be lightly regarded by Mr. Wilson. The Commission is sowing the seed for more distrust and more disorganization of all the nation's activities than did Bernstorff and all his gang of liars and looters. Its work is a distinct contribution to the chaos which Germany is seeking to develop here as it did in Russia, where it brought about conditions which put in power the Bolshevistic element of incompetence, of class hatred and of anarchy; and chaos is the natural result.

## "AIMED IN HELL."

My wrong cries out for vengeance.  
The blow that sent me here  
Was aimed in Hell. My dying scream  
Has reached Jehovah's ear.  
Not all the seven oceans  
Shall wash away the stain;  
Upon a brow that wears a crown  
I am the brand of Cain.

When God's great voice assembles  
The fleet on Judgment Day,  
The ghosts of ruined ships will rise  
In sea and strait and bay.  
Though they have lain for ages  
Beneath the changeless flood,  
They shall be white as silver,  
But one—shall be like blood.

Joyce Kilmer, the poet who wrote the foregoing about the sinking of the Lusitania, has now given his own life upon the battlefield in the fight against the nation which gave holidays to celebrate the murder of the good ship Lusitania and its more than one thousand passengers. The blow that has sent Kilmer and millions of others to death, like the blow against the Lusitania, "was aimed in Hell," and Hell will yet receive its own.



## SPREADING THE DOCTRINE OF NO PEACE WITHOUT PUNISHMENT.

MESSRS. HAGER BROTHERS COMPANY, furniture dealers of Marquette, Mich., in acknowledging the receipt of the War Eagle Series of editorials, write:

We will make a prominent display each day in our windows.

Mr. R. Howland, superintendent of the Asheville & East Tennessee Railroad Co., Asheville, N. C., writes of these War Eagle editorials and says:

I shall take much pleasure in having them framed and hung up in our Asheville waiting-room, where all who run may read.

Mr. W. Champlin Robinson, Director of Oil Conservation, United States Fuel Administration, Washington, D. C., in writing for two additional portfolios of these War Eagle editorials, said:

The Eagle Series you sent me a few weeks ago, and which is hanging up in my office, has been received here with great approval.

I am wondering if you could let me have two additional sets of this series. If so, I will very greatly appreciate it, and will also see that they are placed where they will be appreciated.

Here are three interesting illustrations of how these War Eagle editorials will be publicly displayed where they will be widely read, and we trust will help on the good work of awakening this nation to the war.

Another interesting illustration of their influence comes in a letter from Mr. Edward I. Conkling of Sacramento, Cal., who, writing from McGill, Nev., refers to the fact that he had read one of these editorials in the Denver Post, and evidently not familiar with the work of the MANUFACTURERS RECORD or of the fact that we have been carrying on this kind of a campaign for the last four years, he says:

Here in Nevada on a business mission, I by chance picked up a copy of the Denver Post of the 7th inst. and enjoyed the extreme pleasure of reading that corking editorial of yours upon the front page. What a grand idea it would be if the entire front page of every important newspaper in this old U. S. A. were to blaze forth and continue to spread such virile sentiment among the parents and brothers of our noble sons now making such wonderful sacrifices that we may survive as a free people. Exempted myself, through an accident and being beyond the service age limit, I become disgusted oftentimes at hearing some of these jelly-spined slackers talk about quitting and laying down at this critical period, when we need every ounce of sustaining power within us to keep up the morale of the boys at the front.

Anyone who considers the remotest idea of a peace which does not call for the public execution of every member of that foul Potsdam crowd of monsters in the guise of human form is not worthy of being considered an American citizen. Thank God we have such fearless men as yourself in a position to publicly spread such doctrine! Keep up the good work! More power to your pen and I should like to see this very editorial pasted upon every conspicuous billboard and upon the wall of every place where these weaklings are wont to congregate, that they may fully digest each and every word. Give us some more of this stuff!

## IS THE FIXING OF FOOD PRICES WISE OR UNWISE?

POLITICAL economists have, we believe, very generally questioned the wisdom of fixing food prices, though there is much to be said on both sides. The MANUFACTURERS RECORD has favored a guaranteed minimum price on wheat and some other staples sufficiently high to insure large production and putting no limit on maximum prices except where necessary to prevent extortion between the cost to the producer and the price paid by the consumer. Mr. Hoover and others, however, have favored a fixed price on the ground that this would prevent extortion. If a fixed price will bring the quantity, for it is quantity production that is needed far more than a low price, we shall be willing to accept the fixed-price theory.

Strict regulation of quantity per person for flour as well as for sugar is, to our mind, an essential factor in the food situation which must be adopted to keep the "food hogs" from using a full supply of wheat while conscientious patriots are voluntarily curtailing their consumption. The "food hog" is not the food-purveying profiteer, but the one who, regard-

less of world shortage, refuses to conserve flour and other needed foodstuffs.

The various phases of this situation are presented in a dispatch to the New York Herald from Ann Arbor, Mich., which is as follows:

Price-fixing is wrong in principle. It does not tend to make things cheaper for the poor, but tends to make substitutes more expensive for them. Prices should be left to themselves, but consumption of necessities should be regulated by ration cards, and the Government should do everything possible to afford cheap, rapid transportation for necessities. Those are the opinions of William A. Paton and Wilbur P. Calhoun of the economics department of the University of Michigan. They also insist that no monopolies in foodstuffs or other necessities should be allowed, and that if there is evidence of monopoly against the meat packers the Government should take over and operate those industries.

"We are accustomed to gauge the needs of a community by the prices charged for products," Professor Paton said. "Were the price of wheat unfixed it would tend to go to a high mark, which would cut down consumption, and hence keep the price from going out of sight. By compelling the people to buy substitutes with their wheat it sends the price of the substitutes soaring, the farmer is tempted to grow substitutes instead of wheat, making wheat still scarcer and more difficult to obtain for the person of moderate means.

"Now, the rich man can, and often does, buy as much wheat as he needs, buying also as much of the substitutes as he has to. He uses the wheat and throws away the substitutes. Thus he does not economize on wheat and does waste the substitutes, diminishing the supply of substitutes and making them more expensive because scarcer for the poor man.

"If the price of wheat were left unregulated it would tend to encourage production, making it more plentiful, but the unregulated price, being high, would force people voluntarily to cut down on its consumption and turn to substitutes in a way that is natural and healthy economically.

"Then, to prevent the rich buying huge quantities of wheat, as much as they need, and not buy any substitutes, the Government, in times of emergency, should put all people on wheat rations. This would prevent the rich getting more wheat than the well-to-do or even the poor. That would be fair to everybody, and would not interfere with the fundamental law of supply and demand, on which our entire theory of economics is based.

"Germany started in to fix prices and soon got into trouble and went to the rationing system. In just one instance did Germany fix prices with any degree of success in achieving the desired object, and that was in the case of young pig, which was in such great demand in the first part of the war that the farmers were killing all their young stock and thus making impossible the raising of an adequate number of full-grown pigs. Germany arbitrarily fixed the price of young pig lower than the price of full-grown pig. As soon as she did that, pig raisers naturally stopped slaughtering the young pigs and raised them to maturity.

"The Government should also see that no food products are wasted through lack of transportation facilities," said Mr. Calhoun. "Wheat, potatoes, corn, every foodstuff, should be taken to market as soon as they are ready for shipment, and not one bit should be allowed to rot or even begin to spoil because of lack of freight cars. That would go a long way toward increasing needed supplies."

## SIGN OF DISTRESS.

AT a congress in Berlin within a month, convened at the instance of the Emperor, of the grand masters and chief dignitaries of the grand lodges of Free Masonry of Germany, Austria-Hungary, Turkey, Bulgaria and Finland, a peace propaganda was started.

The Free Masons of the Central Powers are to ask the Free Masons of the Entente to help save Prussian militarism.

*We are sure the Free Masons of France have not forgotten the answer of King William of Prussia to their request that the conquered country be spared the humiliation of a triumphal entry of troops into Paris. The specters of the Uhlans under the Arc de Triomphe on March 1, 1871, are still there.*

The Kaiser, who follows in the footsteps of his grandfather, William I, and detests Free Masonry, showered the delegates with sycophantic attentions. The monarch who ordered his envoys to submit to the embraces and kisses of the unclean Bolsheviks and himself pretended to be a devout follower of Mohammed is all things to all men to serve his own ends.

It is doubtful if this latest move will avail him, though. Those who meet upon the level and part upon the square are not to be deceived by the faker of Potsdam. Ancient and honorable institutions know him not.—New York Telegram.

Such an appeal to Masons would be spurned by every decent Mason in America. Masons are not co-partners with hell.

## WHY THE GERMAN REVOLUTION OF 1848 FAILED.

THAT cowardice on the part of the would-be revolutionists of 1848 in Germany was responsible for failure is the statement made in a letter to the Baltimore Sun by Mr. David Bachrach of Baltimore, a man of German descent, who has been vigorous in pointing out from time to time the crime of Germany and showing how the fearful barbarism of that country has endangered all civilization. In discussing the revolution of 1848 Mr. Bachrach makes the point that it was due to the cowardice of a nation unwilling to suffer and sacrifice for freedom that the world today is paying the penalty. In an interesting letter on the subject Mr. Bachrach says:

You occasionally hear sad complaints from some of our honest, peace-loving citizens as to the sacrifices we are called on to make in a war in which they fail to see our direct interests. Had the Germans succeeded in conquering the Allies, we all know that we would have a very direct interest in the war, even judging from a few incidents of German interference and threats of our small southern neighbors, in the case of one of which our Government was compelled to interfere. With this nation totally unprepared, and the whole power of Europe against us, our fate would be a pitiable one.

This whole senseless war—for it is senseless, and only justified by a defense of all nations against the original robbers and murderers who inaugurated it—was caused by the cowardice and love of peace of the German nation in 1848, at a time when the people had formed a popular government under the flag of "liberty and equality." Without going into the history of the period, a glance at Carl Schurz's Memoirs—one of the heroic band who preferred to expatriate themselves rather than become Prussian slaves—will show that a few regiments of Prussians broke down the entire revolution.

It seems to be true that "the blood of the martyrs is the seed of the church." Look at the repeated acts of self-sacrifice made by the French people for liberty. Look at the seven years' struggle of the American patriots in the Revolution! Were it not for them, we would not be worth anything in this world. Had the German nation the true seeds of self-sacrifice, and made a success of the revolution in 1848, this debacle and holocaust would not have overtaken the world, and which will ruin the German people.

## THE AMERICANISM WE STAND FOR.

Meridian, Miss., August 17.

Editor Manufacturers Record:

I have just received issue of August 15, and have observed the discontinuance of one of your subscriptions on account of the fact that you stand for America.

I am of the opinion that my subscription has either gone past due or will be due in a very short time, and would be glad to have you advise me in order that I may send you my check for renewal for 12 months.

Furthermore, while I do not believe that the MANUFACTURERS RECORD will suffer any financial embarrassment through the discontinuance of the subscription above referred to, I will consider it my patriotic duty to solicit a subscription among my friends to take the place of the one discontinued if you will send me a subscription blank, and I assure you that there will be no charge on my part, because you stand for the kind of America I stand for.

J. B. GRESSETT, JR.

Mr. Gressett's hearty spirit of co-operation is fully appreciated. His letter was called forth by one from a State official of West Virginia discontinuing a subscription because he did not approve of the kind of Americanism for which the MANUFACTURERS RECORD stands.

The only form of Americanism we know is that which stands for civilization against barbarism; for honor among nations against dishonor; for the suppression and punishment of the criminals who have for their own aggrandizement brought woe beyond all power to picture upon the whole world; for the maintenance of our flag and the decision of America to defend its own people from murder on the high seas, from the bomb-throwing, factory-exploding, ship-torpedoing, outraging of women, such as Belgium has suffered, and all the black crimes of a nation of fiends who, having sold their souls to the devil for loot and prey, are trying to drag the world to the bottomless pit. In carrying on this campaign, America now stands by the side of her heroic Allies who for three years saved us from destruction. If any subscriber does not like this kind of Americanism, let him go where he belongs—to Germany. The MANUFACTURERS RECORD is not printed on asbestos paper, and cannot follow him to—Germany.

August 29, 1918.]

## WOULD NOT EVEN HELL REFUSE TO RECEIVE SUCH FIENDS?

U. S. Department of Labor  
Bureau of Industrial Housing and Transportation

613 G Street Northwest—P. O. Box 1903  
Washington, D. C., August 22.

Editor Manufacturers Record:

Attached is an abstract of a letter received by Mr. C. Grant Le Farge, Assistant General Manager, U. S. Housing Corporation. He posted the abstract on the Bulletin board.

It occurred to me that it might interest you, so I copied and secured his permission to send you a copy. It is such fiendish acts as this and the bombing of hospitals that has led me to favor a complete breaking up of the German nation and in addition require heavy indemnities from the fragments.

C. E. HENDERSON,  
Assistant Engineer.

And here is the story which Mr. Henderson sends. It is one that makes every decent man feel that nothing else in all the world counts except the killing of such fiends:

(Extract from a letter to C. G. LaFarge from a friend in Nantucket, August 15.)

"We continue to be the seat of warfare all the time, as, of course, you know; boats sunk around us daily, spies arrested in our midst all the time, and the air fairly humming with rumors and possibilities of dire disasters.

"For the last four days boats of the survivors of the two big fishing fleets destroyed have been coming in, poor, gaunt, haggard men, boys mostly, adrift in a dense fog 200 miles from shore, stripped of everything and not allowed to take a drop of water or a biscuit with them. In the first lot a man managed to smuggle a compass and another a cabbage, and by sucking the cabbage they were able to reach here. The second lot were picked up by a boat, but they believe all the others have perished, as the fog has been impenetrable for five days, and with no water they could not last long.

"And the captain of the U-boat was a Swede or Norwegian who had lived in New Bedford for eleven years and had fished and sailed and eaten and slept with all our fishermen, and knew the coast here from A to Z, and called all the men by their names and laughed at them as he turned them adrift!"

No punishment which could be inflicted by man upon such fiends would be adequate for the occasion.

Rev. Newell Dwight Hillis once said that at one time he had rather abandoned the view of a literal hell of burning brimstone, but if there were no such place he would be willing to see it created and kept in full running order for at least 2,000,000 years for the Kaiser and his fiends.

## ON TO BERLIN!

WITH this issue we are sending to every subscriber a supplement entitled "On to Berlin!" in the form of a cartoon broadly sketching the map of Europe with American soldiers marching through France and Italy, on to Berlin, Vienna and Constantinople, with the American flag flying over these cities, while the fighting eagle of America looks down from his lofty perch upon the work of our soldiers and those of our Allies as he sees our victorious flag flying over the conquered cities of the nations which have drenched the world in blood.

We believe that every reader of the MANUFACTURERS RECORD will be serving his country by posting this cartoon in some conspicuous place in his office or where it may be seen and read by all men who happen to pass that way.

This cartoon also has been printed on heavy paper more than twice the size of the reduced form in which it appears in our supplement. In this larger size it is admirably adapted for hanging in store windows or for display in conspicuous positions in shops and in offices. It will be mailed carefully rolled and protected to any address for 50 cents.

No man can see this visible suggestion of the thought that there should be no peace until our flag floats over Berlin and Vienna and Constantinople without having his patriotism quickened and his heart steeled against any premature peace.

"On to Berlin!" should be the nation's cry.

## A PROTEST FROM KENTUCKY AGAINST HORSE RACING NOW SHOULD BE HEEDED EVERYWHERE.

JUST at a time when the Pimlico racetrack gambling interests of Maryland are widely heralding their plans for the race meet this fall, the Courier-Journal, in the very heart of the racetrack gambling center of the world, is denouncing with extreme vigor the decision of the Racing Commission of Kentucky to permit the races to be held this year.

The Courier-Journal says that the Racing Commission "has turned a deaf ear to the plea for the suspension of racing this fall, defending its course with elaborate arguments which deceive no one." It adds:

The Racing Commission was created for the purpose of promoting racing in Kentucky; it is now imperiling the racing interests of the future by permitting racing this fall, at a time when the people are in no temper to compromise with any element showing even an apparent lack of fullest sympathy with the war-time spirit or of any failure of complete co-operation with those who are moved by that spirit to an unreserved consecration of their time, their energies, their resources to the one all-dominating purpose of winning the most decisive victory in the shortest possible time. They are in no mind to make any concessions to an exhibition of a sport so engrossing in its action on the bodies, the minds and the means of its devotees.

It is a hopeful sign when in the heart of the racetrack gambling center of America the Courier-Journal thus voices its protest against racing at the present time, when the entire energies of the country should be given to war work. It is a crime against this country and against civilization for men to be employed in this racing business, consuming transportation and foodstuffs and feedstuffs and absorbing the thought of thousands of people in the racing and the gambling connected therewith, when every ounce of the nation's energy should be centered on how to win the war. Throughout the moral forces of the nation there will be great rejoicing that the Courier-Journal has taken this vigorous stand.

The Baltimore Sun has taken up a similar fight against racing in this State during the war.

If these Pimlico races are permitted to be held, thousands of men who should be engaged in war work will spend their time attending them and their money in gambling in connection with them, and with all their thoughts absorbed in this gambling project, instead of being absorbed in this great world tragedy through which we are passing.

## GOVERNMENT REGULATION OF HIGHWAY IMPROVEMENT DURING THE WAR.

THE Bulletin of the United States Highways Council is before us, and while it has certain drastic regulations and will, to an extent, delay work on roads and streets because of the approval which it is first necessary to get from State highway departments, and then the approval of the United States Highways Council, it appears that necessary work will be permitted, and the Bulletin explains at considerable length what is considered necessary work.

The Bulletin is printed in full in the news columns of this issue. By its provisions it will be seen that in the order of their assumed necessity there first come military roads, those used regularly for the transportation of the military supplies in considerable quantities. Second, those of economic value, which are defined as those which promote the welfare of the nation and which are not merely local in their benefits. As further explanation of this, it is stated that roads of economic value may be considered first as highways which, while not directly used for military purposes, yet serve to help win the war by greatly facilitating the outward movement of the war supplies. Also roads which relieve congestion on railroad lines and roads which promote the outward movement of natural products needed by the nation and other roads which further housing operations undertaken by the Federal Government and other agencies. Unfinished contracts will also be given due consideration with regard to their importance and to the results depending on them.

The Bulletin announces that the council will begin shortly in co-operation with the office of Public Roads of the Department of Agriculture and the

highway departments of the various States the preparation of a program of road and street construction throughout the United States for the working season of 1919, the object being to obtain an approximation of the character and extent of street and highway construction, which is deemed essential for next year, together with the amount and character of financing required.

In a letter from the Highways Council emphasis is laid on the desirability of having the applications which are made to the Council for approval signed by the officials in charge of the work rather than by contractors, as it is earnestly desired by the Council that the State, county, township and municipal officials responsible for highway and street work shall actively assume responsibility in dealing with the difficult highway problems incident to the war situation.

The Council announces that it will readily give its attention to any suggestions as to points which should further be brought out in making the policy and procedure of the Council more clearly understood by the public.

## GREATER ZEAL BY COAL MINERS NEEDED.

A RECENT letter from Clarksburg, W. Va., gave an interesting account of the way in which coal miners are not doing their utmost toward the winning of the war. In substance, the story sent to the MANUFACTURERS RECORD is as follows:

On a certain week in the recent past there was need for 2400 cars of coal at Curtis Bay, Baltimore, from the Clarksburg district for the bunkering of ships. The demand for this coal was made on the Fuel Administration of Clarksburg. It was immediately made public to the miners and operators that that region had to do its very utmost to meet the requirements. The district representative of the Fuel Administration went so far as to make a direct appeal to the president of the United Mine Workers. He issued a circular to every miners' union in that section, urging that every ounce of effort be put forth to get out coal. Attention was called to the fact that in the great war, which depended largely upon American effort and the special effort of West Virginia miners, coal was absolutely essential. Notwithstanding this, there was a large slump in the output of coal on a certain Tuesday. Seventy cars were ready for coal at the Wendell mines, but most of the mine workers were away attending a funeral. There were 147 men walking in line at this funeral behind a band of 18 pieces, and there were 20 men in autos. The funeral procession marched from the depot through the main thoroughfare of Clarksburg at 8 o'clock in the morning. Many of the walking miners wore the badge of the United Mine Workers.

It is true that a funeral is a serious thing, but not so serious as the winning of the war. To close down a mine at this time in order to attend a funeral is shirking responsibility to the nation. It is as though the soldiers in the trenches at some crucial hour in the battle stopped their fighting and went to march in a long parade to a distant city to attend the funeral of a comrade.

The output of coal is as essential as the fighting on the battlefield, and yet while men on the battle front pass on by their dead comrades, the mine workers at Wendell went to a distant town and made a long parade to attend the funeral of some fellow-worker. The old custom of shutting down a mine for a full day whenever a funeral occurred, which has often been done in many sections of the country, should in this world crisis be abandoned. We have known of cases where an entire mining camp was closed, even when most of the miners were white men, merely because a negro baby whom they had never seen and of whom they possibly had never heard was to be buried. The day of the funeral was simply used as an opportunity to take a holiday and do no work. Surely there must be some power which will enable the miners of all classes, the educated and uneducated, the natives and the foreigners, the white and the black, under the tremendous issue at stake, to be ready to forego the many holidays which they have taken in the past.

We are advised that the miners in the anthracite regions of Pennsylvania have by mutual consent agreed to a new system, by which a committee of six attend a funeral. The operating company pays this committee its wages, and the mine keeps on uninterruptedly at work. Some such spirit as this must prevail not only in the coal regions, but in every other industry, if we are to do our part in this great struggle.

## A Suggestion as to Strikers.

[Wall Street Journal.]

Every male striker should be automatically drafted. He is not a worker.



# Stoppage of Work on Muscle Shoals Dam Said not to Affect Nitrate Production

POWER FROM EXISTING PLANTS FULLY PROVIDED FOR, IS STATEMENT  
MADE—LABOR AND MATERIALS TO BE UTILIZED ON OTHER WORK.

[Special Correspondence Manufacturers Record.]

Washington, D. C., August 27.

In order to conserve both labor and material, the Government has suspended work upon the construction of Muscle Shoals power dam No. 2 in the Tennessee River, just east of Sheffield, Ala. But, contrary to fears aroused in some quarters when the suspension was announced, there will be no halt in the upbuilding of the great nitrate plants, whose importance to the nation, especially from a military viewpoint, has lent such prominence to the Muscle Shoals project.

The power dam, as the Ordnance Department explains, was being constructed in order that the nitrate plants might be operated at low cost after the war, when they will be devoted almost wholly to the production of nitrate fertilizers for the use of farmers. But it has never been expected that the dam could be finished in less than three or four years. In the meantime, preparations had been made to provide steam and electric power for operating the nitrate plants as soon as they could be completed. And inasmuch as much material and no small amount of labor were being expended upon the water-power contract, the War Department decided that it would be judicious to transfer such material and such labor to activities more essential for the winning of the war.

Aside from making this explanation, the Ordnance Department, which is charged with the creation of the Muscle Shoals improvements, declines, as heretofore, to make any statement whatever.

From other sources, however, it has been learned that, so far from being delayed, the work upon the two nitrate plants at the Shoals has progressed rapidly; that the first unit of plant No. 1 has already been completed at a cost of \$5,000,000, and that only about one-quarter of plant No. 2 is still to be constructed. Nitrates are now being shipped from plant No. 1.

The War Department halted the work upon the dam after receiving the answer of the War Industries Board to a request that the project, as an "essential" undertaking, should receive the privileged consideration grouped under the term "priority." The board is said to have declared that, as several years would necessarily elapse before the dam could be finished, the work should no longer be permitted to use labor and material that could otherwise be engaged directly in the prosecution of the war.

Materials that would have been utilized in the dam will, of course, be transferred readily to some other construction. It is declared that furthermore there will be practically no loss of labor at the Shoals, inasmuch as the men who have been working on the dam have, to a large extent, been needed at the nitrate plants. Indeed, one of the understood objects of the recent order was to prevent men from leaving the nitrate plants in order to get employment on the dam.

Ample power for operating the plants was arranged at the start, when no expectation was entertained that the dam could be made ready in time to serve the plants as soon as they were finished. At plant No. 1 a steam-power plant has been erected that affords 6000 horse-power. In addition, 30,000 horse-power is transmitted from the steam plant of the Alabama Power Co. on the Warrior River, 90 miles away. At plant No. 2 a steam plant has been built capable of providing 120,000 horse-power. Not later than October another unit of the Alabama Company's Warrior River plant will be ready to transmit 30,000 more horse-power, which may be used at either of the nitrate factories or may be divided between them.

The total equipment will thus give 186,000 horse-power for present operations and for auxiliary uses after the dam has been completed and the water-power made available.

Plant No. 1, one unit (or one-quarter) of which is already operating, has a productive capacity of about 11,000 tons of nitrate annually. Here the nitrogen is obtained by the "synthetic" process from ammonia, and

not from the air. The process has been developed by the General Chemical Co.

Fifteen thousand men are now engaged upon the nitrate plants, mainly upon plant No. 2. The works occupy 2200 acres. There are bunks for 12,000 of the men, eating-houses for all of them, and a brick "theater" that provides free entertainment every night in the form of moving pictures.

Two units of plant No. 2 will doubtless be turning out nitrates before the end of October. The whole plant will cost about \$30,000,000. Its annual capacity will be 135,000 tons of nitrates for gunpowder or 220,000 tons of fertilizer concentrates. The permanent employees at this plant will number upwards of 4000, most of whom will be skilled operatives.

The three remaining units of plant No. 1 will no doubt be built, although they have not yet been started. They will cost \$15,000,000.

## Nitrate Production Not Affected by Order Suspending Power Plant Work.

The following statement is authorized by the Army Ordnance Department:

"The production of nitrates for the Government will not in any manner be affected by the recent order causing the temporary suspension of work on the water-power development at the Muscle Shoals nitrate plants, according to a statement just issued by the Ordnance Department.

"This order was issued upon representations made by the War Industries Board to the effect that the materials used in the erection of the water-power plant on the Tennessee River should be regarded as non-essentials. The effect, therefore, is to stop only the erection of the plant, power from which was not anticipated for some four or five years.

"The development of this water-power project was undertaken by the War Department in line with its established policy of utilizing these plants for the production of nitrates for use in agricultural pursuits after the war is over, by which time the water-power will be available.

"The work on the Muscle Shoals plants is progressing rapidly, one of which is about 60 per cent. complete, and over 20,000 men are now employed there. Ample power for the operation of these plants is obtained from a steam-electric station erected on the Tennessee River, and also purchased from the Alabama Power Co.

"The Government water-power project on which work has been suspended was projected for the purpose of obtaining an adequate supply of cheap power in later years."

From the office of the chief of engineers, War Department, Washington, D. C., the following statement has been received:

"In reply to your letter of the 19th inst., requesting certain information in regard to the construction of dam at Muscle Shoals, Tennessee River, I have to inform you that owing to the inability of the War Industries Board to give priority orders for materials, the Secretary of War has authorized the temporary suspension of all operations at this locality except office work and the preparation of plans."

## Record Production of Portland Cement in 1917

Statistics of the cement industry in the United States in 1917, prepared under the direction of Ernest F. Burchard of the United States Geological Survey, Department of the Interior, indicate that the total shipments of Portland cement from the mills amounted to 90,703,474 barrels, valued in bulk at the mills at \$122,775,088. This represents a decrease in quantity of 4.1 per cent. and an increase in value of 17.8 per cent. compared with 1916. The combined shipments of natural and puzzolan cements in 1917 was 639,456 barrels, valued at \$435,370, representing a decrease in quantity

of 24.1 per cent. and an increase in value of 1.0 per cent. compared with 1916. The production of Portland cement in 1917 was 92,814,202 barrels, compared with 91,521,198 barrels in 1916, an increase of 1.4 per cent. This production holds the record, the next highest output, 92,097,131 barrels, having been made in 1912.

Not only was the largest output of Portland cement made in 1917, but the factory price received during the year throughout the country was high, ranging from \$1.22 per barrel in the Lehigh district to \$1.60 in the State of Washington, and averaging for the whole country \$1.354, as compared with \$1.103 in 1916.

The exports of hydraulic cement from the United States in 1917 were 2,586,215 barrels, valued at \$3,528,536, or \$2.06 per barrel, compared with 2,563,976 barrels, valued at \$3,828,231, or \$1.49 per barrel, in 1916. The imports for consumption in 1917 were 232 barrels, compared with 1836 barrels in 1916. The statistics of exports and imports were compiled from the records of the Bureau of Foreign and Domestic Commerce, Department of Commerce.

The accompanying table, compiled from reports received from all mills in the United States, shows the shipments, their value, the production and the stocks of Portland cement for 1916 and 1917 by districts.

PRODUCTION OF PORTLAND CEMENT BY COMMERCIAL DISTRICTS, 1916 AND 1917.

	1916. Barrels.	1917. Barrels.	Per cent. change 1917.
Lehigh district (Eastern Pennsylvania and Western New Jersey):			
Shipments	25,360,287	24,423,641	- 37
Production	24,165,384	24,423,597	+ 12
Stock	2,155,674	2,163,265	+ 61
New York State:			
Shipments	5,693,477	5,498,728	- 35
Production	5,441,677	5,417,559	- 45
Stock	798,297	808,328	+ 12
Ohio and Western Pennsylvania:			
Shipments	8,123,492	7,248,264	- 94
Production	7,936,731	7,345,416	- 72
Stock	552,930	616,244	+ 113
Michigan and Northeastern Indiana:			
Shipments	5,747,113	4,835,294	- 56
Production	5,521,876	5,293,510	- 47
Stock	453,282	882,421	+ 93
Southern Indiana and Kentucky:			
Shipments	3,296,215	2,386,247	- 89
Production	3,338,942	2,517,257	- 82
Stock	477,282	611,199	+ 91
Illinois and Northwestern Indiana:			
Shipments	16,687,659	10,233,223	- 39
Production	19,399,563	10,927,593	- 43
Stock	1,193,241	1,889,763	+ 94
Maryland, Virginia and West Virginia:			
Shipments	3,315,323	3,109,068	- 62
Production	3,189,585	3,122,926	- 21
Stock	256,663	305,948	+ 81
Tennessee, Alabama and Georgia:			
Shipments	3,541,572	2,686,329	- 41
Production	3,592,259	2,676,354	- 48
Stock	237,285	220,583	- 71
Iowa, Missouri and Minnesota:			
Shipments	11,178,790	11,510,753	+ 29
Production	10,592,234	11,774,381	+ 12
Stock	860,001	1,123,654	+ 81
Nebraska, Kansas, Oklahoma and Central Texas:			
Shipments	7,735,418	7,495,415	- 43
Production	7,592,111	7,719,365	+ 23
Stock	392,277	686,390	+ 59
Rocky Mountain States (Colorado, Utah, Montana and Western Texas):			
Shipments	3,141,855	3,197,284	+ 18
Production	3,097,285	3,261,675	+ 53
Stock	197,084	263,963	+ 81
Pacific Coast States (California, Washington and Oregon):			
Shipments	6,901,695	7,259,050	+ 51
Production	6,830,454	7,372,981	+ 19
Stock	787,063	891,895	+ 33
Total:			
Shipments	94,552,296	90,703,474	- 41
Production	91,521,198	92,814,202	+ 14
Stock	8,360,552	10,462,882	+ 81

\*No output 1916.

## Birmingham Steel Corporation.

All details have been determined for the Birmingham Steel Corporation's plant and construction began last week, with contracts awarded for erecting buildings and furnishing machinery. The mechanical equipment will include shears, punches, benders, power plant, etc. for a monthly capacity of 4000 tons of fabricated steel shapes. These shapes will be used for the construction of Government vessels at Atlantic and Gulf coast shipyards. G. S. Bergendahl of New York, the company's chief engineer, has located at Birmingham to be in charge of building and equipping the plant. The initial investment will be \$1,000,000, with 2000 men employed, and future plans contemplate an increase to between \$15,000,000 and \$20,000,000, with facilities for employing 20,000 men. These plans are in accordance with announcements when the company organized recently, its president being Henry L. Brittain of New York.

Democracy is a failure if it should let royal criminals go unhung or unshot because they are of royal blood, and it would deserve to be destroyed by autocracy.

Our suggested peace terms do not indicate any punishment of the criminals who have been guilty of murdering these millions of soldiers of our sons, and who will before they have surrendered order hundreds of thousands and perhaps a million more of our soldiers. Nor do your peace terms exact any punishment of the people of Germany, Austria and Turkey and Bulgaria who have up-

I have recently pointed out that at the close of the Civil War in 1865 all of the indebtedness incurred by the Confederacy for carrying on that war was wiped out and not a dollar of it ever repaid. The investment in slaves was necessarily destroyed with the death of slavery, and all intelligent Southern people today recognize that there was no injustice in their having to bear this tremendous burden when they lost in the contest for what they believed to be a constitutional right. They fought not for slavery as slavery, though that was one of the issues involved. At the close of the Civil War the South thus had to face the terrible losses of four years of

P. S.—I am taking the liberty of publishing this as an open letter to you merely in order to bring out for public discussion some of the points which I have raised.



### Punishment Must Fit the Crime.

[New York Herald.]

In his open letter to Senator Lodge, which appears in another column of the Herald, Mr. Richard H. Edmonds gives expression to views held by the great majority of Americans. If the criminals who brought on this war and the people who have joined with them in their unholy crime against civilization are not to be visited with condign punishment the mighty sacrifices made to save civilization to the world will have been made in vain.

Senator Lodge is right when he says, "No peace which will satisfy Germany will satisfy us," but he could have gone further, for certainly no peace which partly satisfies Germany will satisfy those now at war with her. The duty of those nations which German militarism and the German people set out to conquer for the avowed purpose of robbery is to see that Germany is not only beaten to her knees, but that personal punishment is meted out to the robbers and the murderers.

Germany is being beaten, and knows it. Failing to win the war, she will bend all her energies from this time forward to winning the peace. Very soon there will come forth from the military ark now rocking on the perilous waters of strife a dove of peace bearing an olive branch of concession. The concession may be real if not substantial. The hopes of Wilhelmstrasse now are pinned upon bringing about a conference before German defeat becomes a German disaster, and to this end German diplomacy is counting upon enlisting the aid of the pacifist element, which always has "played the game" of the robbers and the murderers.

There can be no conference, no armistice, no peace, that is not a peace with victory for the right. War must be carried into Germany as the Germans carried it into France and Belgium. Germans from highest to lowest must be punished for the awful crimes they have committed against civilization, against peoples and against individuals. Civilization will acknowledge itself a failure unless it makes the punishment of the criminals fit their crimes—full measure and running over!

[New York Sun, August 26.]

### CHURCH CHEERS DEMAND TO KILL GERMAN CHIEFS

**Dr. Matthews Would Isolate Nation  
From Remainder of World for  
100 Years.**

**NO SEAT AT PEACE TABLE.**

**Banish Kaiser and Court-martial  
and Shoot Authors of Sea and  
Land Crimes.**

Staid old members of the conservative Fifth Avenue Presbyterian Church stared in amazement yesterday as applause and cheers greeted the most heated pulpit attack on the Kaiser and Germany that had been made in this city since the beginning of the war. They were no restrained evidences of approval. The auditors voiced their feelings with all of the freedom that would have marked a political meeting in a campaign designed to stir the popular passions.

Astonishment was openly expressed at the unusual scene. A New York elder said that the congregation was made up of visitors from the West and South, and that it was the out-of-town element that had shaken the traditions of the institution to their very foundation.

The Rev. Mark A. Matthews, D.D., of Seattle, Wash., a minister of national repute, delivered the sermon that set the vaulted arches ringing with applause.

He spoke of the peace terms that the Allies should impose upon Germany, consigned the Kaiser to exile, shut Germany off from relations with all the world and demanded the execution of German leaders. The speaker called profiteers "infamous traitors," who "ought to be court-martialed and shot."

**Must Be No Negotiated Peace.**

Preceding the peace terms of the Allies, ten in number, the preacher gave what he called four preliminary suggestions. They were:

"Every peace proposal heretofore suggested has been

German-made, regardless of the pious or uniform lips or pens through which it has been filtered.

"There shall never be a negotiated peace, nor shall the insidious propaganda for a negotiated peace be considered.

"The Vatican shall not have a seat at the peace table. It has no right to such seat unless it were frankly to admit that it is one of the belligerents; if on the side of Germany—for that reason and for others, it shall never have a seat at the peace table. It is not an intermediary, cannot be, has no right to be claimed as such.

"Germany shall be crushed and made to submit to terms of peace dictated to her by America and our Allies. The German people are just as much to blame as the Kaiser and his war lords. Therefore, there shall be no peace except that which follows absolute victory and the establishment of righteousness."

The peace terms prepared by the minister were:

"1. Germany shall not sit at the peace table. She has forfeited every right to sit at a table where gentlemen of integrity and honor preside. She may watch the proceedings at the peace table from her seat in the cage of culprits.

**Would Shoot German Generals.**

"2. The peace table shall be preceded by the court-martial in order forever to prevent Germany or any other nation from committing outrages which Germany has committed. We must first ascertain from Germany the commanding officer in charge of the submarines at the time of the sinking of the Lusitania. He must be court-martialed and shot. Who were the officers in command when Red Cross boats were destroyed, hospitals bombed, nurses killed and Belgium raped? These commanding officers must be court-martialed and shot. Every officer in command of a division or corps and who had authority to order or to prevent the outrages committed must be court-martialed and shot.

"3. Germany shall surrender her sword, demobilize her army and surrender her navy.

"4. Germany shall restore Belgium, repair every injury and repay, in adequate financial compensation, for every ruin she has wrought. She must return Alsace and Lorraine, free Poland, restore Roumania, Serbia and all parts of Italy and France injured or held by her. She must relinquish all claims on Russia and restore to Russia everything claimed in the recent farcical treaty with Russia.

"5. She shall relinquish all hopes of again possessing her colonies. Palestine and Asia Minor shall be free of Germany and the bloody Turk. Constantinople and the Dardanelles shall be freed from all German and Turkish power. They shall be free to all the world.

**Must Do Penance for 100 Years.**

"6. Germany shall live on herself, within herself and to herself. She shall remain in isolation, in sackcloth and ashes for 100 years. She shall not have during that period entrance to the political and commercial league of nations.

"7. She shall be cut off from the commercial confidence of the world. She shall not be recognized as a trader among the civilized nations. Any merchant or any person, a citizen of this Government or of our allied governments, who buys an article made in Germany for the next hundred years ought to be court-martialed and shot as a traitor to humanity and righteousness. It is a crime against humanity for a person to trade with an outlaw.

"8. Germany shall submit to a protectorate over her mind and conscience for an indefinite period—at least for 25 years, or until we have trained the mind of a new generation. Germany organized her present murderous mind through her universities. She must be saved from herself, and for the world's safety.

"9. The Kaiser shall be exiled to some lonely isle, there to spend the rest of his life, and be permitted to read only literature which tells of the success, triumph, peace and prosperity of America and her Allies.

"10. The seas shall be free. The world shall enjoy liberty. Militarism shall be crushed and representative, righteous government shall be established on the earth."

**When the War Will End.**

[The St. Louis (Mo.) Republic.]

\* \* \* The one indestructible belief and purpose in this war is that German power will be and shall be overcome before peace returns. The date of the conquest is something for future historians to record.

### Beware German Propaganda.

[Chattanooga (Tenn.) Daily Times.]

Colonel Penrose, the officer in command of the prison barracks camp at Fort Oglethorpe, spoke to the Kiwanis Club yesterday at its regular midday luncheon, and after a very interesting account of how the Government treats its prisoners of war and its alien enemies, he pressed the members to resist in every way possible the insidious German propaganda of every kind now as never before, perhaps, working its stealthy poison into the hearts and minds of the people. These enemies of our peace and our democracy are insatiable and they are everywhere working their plots and their counterplots for our undoing and in every conceivable way. Since the Allied victories on the French front the activities of these agents of the Kaiser—and there are hundreds of them scattered throughout the country and in all sorts of disguises—are turning their attention to "peace by negotiation and by compromise." They are very sympathetic with those whose boys are abroad in the fighting forces of the army, and they never tire of telling of the dangers that beset the soldiers of all the countries—and for prudential and deceptive reasons they include the German soldiers—and how better it would be to stop the slaughter and end the blood-letting before all our "dear boys are slain!" They use all the sophistries of their Berlin masters to taint the minds of American citizens with the treason of a "German peace," for any peace not made by the Allies around a council table in conquered Berlin will be a German peace.

It is against these the public should be warned. We are in this war for a definite purpose, and that purpose is to destroy the bestiality, the cruelty, the inhumanity and the barbarism in the German system, the Kultur that teaches the slaughter of innocents, extols the annihilation of non-combatants and neutrals; seeks the domination of small peoples by a merciless autocracy and prescribes dehumanizing of the races of men as essential to high governmental efficiency! It is to save Germany as well as the world from the blight of a cruel imperialism that takes no account of human life, human rights or human instincts that we have taken up the sword. Dr. Muehlton, the ex-director and manager of the Krupp works in Germany, tells us the effect of this system upon the German people, as indicated by the effect upon the soldiers in the field. "The truth is," he tells us in a solemn statement made for the information of the world, "the German soldiers have become brutalized. They have incessantly fired upon the population and ravaged so many villages that they have lost all sense of proportion and all power of judging what is and what is not permissible in war!"

It is to relieve the world from the possibilities of a repetition of these barbarities and the resulting cruelties of this war that we must "carry on" until the German autocracy is beaten to its knees and its Kultur philosophy has been scattered in the scrap heap of by-gone heresies.

### No Maudlin Sympathy With Germany When Whipped.

[Staunton (Va.) Leader.]

While everything is calm and peaceful now in the ranks of the Allies, that state is likely to be rudely shaken when we come to the end, and the question of making terms with our enemies must be considered. We fear unless the fullest discussion and a general propaganda beforehand are set on foot we shall meet sad disappointments, at least those of us who believe in exacting toll for the crimes Germany has committed. There will be present the same sentimentalists who lavish flowers on the murderers of women and children in our country, a class that has always been in evidence when the worst of murderers have approached the gallows. Every pacifist and pro-German in this country and in every Allied country, will become active, and unless we watch closely what is taking place, they will succeed in having terms made that will leave Germany in position to claim at least a measure of victory, because she will have been excused from paying the full penalty for all her deviltries.

If Germany gets her deserts, she will not be permitted to strut up to the conference table with spurs and sabre rattling, but will be required to make "unconditional surrender" and wait to receive the verdict of the jury; and the verdict will be such as to make every

August 29, 1918.]

**How Shall Germany Be Punished?**

[The Laurinburg (N. C.) Exchange.]

With the success of the Allied armies on the western front and the wresting of the initiative from the foe by General Foch and the further prediction by high military experts that another year should see the end of the war with a great victory for America and her Allies, the question uppermost in the minds of many now is, What sort of peace will the Allies demand of Germany and how shall Germany be punished for the fearful crimes she has committed, for the outrages upon humanity and civilization this nation of fiends has perpetrated in the name of Force?

Any adequate punishment in the way of retaliation or reprisal against the Hun and his Fatherland is impossible of conception. The case against Germany is bad in the extreme, and in the courts of international justice and the "parliament of man" no sufficient punishment could be meted out to her except tempered with a great mercy—a mercy of almost infinite compassion. The crimes Germany has committed, the cruelties she has practiced, have been limited only by her hellish imagination. With all the instincts of the savage, coupled with the weapons of civilization, she has despoiled, looted, outraged and tortured those who happened to be in her way or who dared oppose her in her mad lust for world domination.

Certainly as much as we loathe the Hun, no true American would want American soldiers to do the things in Germany that Germans have done in France and Belgium. No American, however wrought with passion and a desire for revenge, could do unto the women and children of Germany as the German has done to the women and children of France and Belgium, of Serbia and Poland, and wherever he has set his vicious foot.

But Germany must be punished and made to pay for the fearful crimes she has committed against humanity, and she must be taught that for all time there must never be a repetition of the unholy attempt to enslave the world she has so viciously and so crudely made in the last four years. Compared with the rattlesnake, Germany is not even upon a level of respectability. The rattlesnake gives warning and attacks in the open, but he is promptly killed and put out of the way as an undesirable. Shall we deal with all Germans as we would with rattlesnakes?

Certainly Germany's word of honor cannot be accepted as a guarantee of anything. Never will the Allies deal with the Hun at a peace council except to hold a sword above his head. And no peace terms will ever be acceptable to the world except those that carry with them a guarantee of Germany's future good behavior. The only possible way to secure this is to place about the Hun the shackles of debt and bondage and set his feet so deep in the mire of shame and the loathing of his fellows that future generations of his breed will find it difficult to attain even a degree of respectability. He has placed upon himself a mark of the beast, and he must wear it before the world.

Mr. Richard H. Edmonds, editor of the MANUFACTURERS RECORD, makes the splendid and feasible suggestion that Germany should be made to pay for the rehabilitation and repatriation of Belgium and Northern France and the other countries she has overrun, the entire cost of the war to France, England, the United States and Russia, and to pay to the families of every man killed or permanently disabled a financial remuneration. This would not conflict with America's aims of no annexations and no indemnities, and would be punishment for Germany and a blessing to the world.

**Prussian Militarism Must Be Annihilated.**

[The Atlanta Journal].

Germany will never yield conclusively until she is beaten to her knees. We cannot afford to believe anything but that Germany still holds tremendous reserve powers. The Hun who planned and prepared for this war for half a century, the Hun who has fastened his bloody fangs on Belgium and Russia and half Europe, the Hun who has stopped at no barbarity and has not hesitated to stoop to any villainy for a slight advantage, the Hun who understands no argument save the cannon's voice, is not to be crushed with a single blow, not to be shattered until he is drained of his last resource.

It is to be expected that any day Germany will suggest peace terms, but it scarcely seems necessary to

state that at the present stage they could be anything but a ruse to gain a breathing spell which would spell disaster to the Allies. The only course for the Allies is a fight to the finish, and a finish that means the annihilation of Prussian militarism in all its phases.

**Make Germany Pay.**

[The Petersburg (Va.) Index-Appel.]

Richard M. Hurd, who is an officer of the American Defense Society, recently declared in a communication to the press that "we are sufficiently good business people to feel that Germany must repay every penny already extracted as cash indemnities from Belgium, \* \* \* and the entire cost of the war to the Allies." The declaration has elicited a great deal of comment, some of approval, some of another character. The general character of the latter kind is based upon the question of whether Germany's promises to pay will be worth anything when this war is over, so depleted will be her finances.

It should be remembered that Mr. Hurd, in advocating placing this enormous cost upon Germany, also advocated compelling her to repudiate her bonds held in Germany. He argued that there was no sound reason in finance or good faith why the people of Germany who have prided themselves upon their devotion to country should be permitted to hold and eventually to collect these obligations of the German Government, while innocent Belgium, whose country has been ruined by German armies, should continue to drag along as one of the impoverished little states of the world; no reason why the German people should be living in affluence, their chief industry that of clipping coupons from Government bonds, while the people of Belgium, German victims, should be living in the extreme of poverty.

Of course, the same argument applies in the case of Roumania, of Serbia and of those provinces of Russia which Germany is stripping for enrichment of Germany and Germans. \* \* \*

The Allied armies are driving the Germans before them in France. The signs of a German retirement on a much larger scale than any yet witnessed are numerous. But the absolute rout of the German armies, provided they rallied at the Rhine, should not cause the slightest weakening of the determination of the Allies to fight the war to a finish, meaning by that term to keep it up until Germany is willing to accept the terms to which we shall compel her to yield. To quit fighting before Germany acknowledges complete defeat would mean nothing more nor less than renewal of the struggle within a few years. To quit and leave Germany free to work her will in Russia would assure another world struggle probably by the end of the present decade.

**No Pardon Without Repentance.**

Indianapolis, Ind., August 17.

Editor Manufacturers Record:

I come again to commend you in your grand work, and in the fearless way you present the truths to the public, heedless of the honors or dishonors you may receive.

As surely as there is a God in Heaven and so surely as He blesses the efforts of those that do His will, so surely He is blessing your efforts to arouse the people to a duty toward the best interests of all. My memory is such that I cannot recall all the good things you have said. There is one thing I am glad you have dared to mention, and that is the evil that is lurking behind an organization that will resort to any means to clear a criminal that has committed an unpardonable crime. Our God is a just God; with Him there is no pardon without repentance. For some cause, I know not what, unless it be through sentimentalism or political reasons, our laws are warped and twisted till some of our worst criminals are turned loose on the public, or perchance they receive a sentence from our courts and in a short time they are pardoned by our sentimental rulers for the sake of a few tears shed by some sympathetic friends. Then we wonder why we have lynch laws! I am bitterly opposed to mob laws, but would have the laws enforced, regardless of how hard it might hit. If our laws are to be trifled with and favoritism shown, then we had as well have no laws, and if we are going to give way to sentimentalism, then we can have no justice.

I am afraid sometimes that we have got to be such a goody-goody people; that the first time the devil and

German think twice at any time in the next century before he votes to make war on any country.

Every wrong committed should be catalogued, and a full money value placed on it, if such a thing be possible, and Germany made to pay it. Then every human being held under German tyranny should be set free, no matter in what part of the world he may be. It would be treachery to decency to return to Germany any measure whatever of control over the poor negroes in Africa, or over the peoples of any other outlying territory which she has in the past seized or acquired by devious methods. Let Germany after the war consist only of territory inhabited exclusively by Germans. That is the only territory over which they have any right to exercise authority. The whole Allied world should be preparing to enforce these terms.

High ideals of generosity, sympathy, neighborliness are wasted on the Germans of today; and it would be a grievous mistake to entertain them when peace terms come to be considered. It would be but a repetition of Aesop's story of the farmer who warmed in his bosom a frozen snake that turned and bit him when it was brought back to life.

Before Germany can be treated with kindness she must be punished for her crimes, made to make restitution, and then left to herself to repent of her misdeeds and to recover through long years of toil and good conduct her position in the family of nations.

**Germany Has Forfeited Her Right to Continue as a Great Power.**

[New York Sun.]

Germany has no honor. She is bankrupt in honor. Where honor has its place in the moral anatomy of decent nations there is in Germany what would be a vacuum were it not a stench. The rulers of Germany have made of German "honor" a jeering and a scoff throughout the world. It is the kind of "honor" a Yahoo or a gorilla would sink in shame to be accused of.

When the Allies get through with Germany she will not be a great Power. Her days of being a great Power are over. The road to their restoration is a long and a weary one, filled with toils and tribulations, one on which Germany cannot even so much as set foot until she has a new birth. She is a pariah now, an outcast among the nations.

Can it be possible that the Hun is still haunted by the dream that his colonies will be restored to him? Does he really believe that China and Japan will consent to give him back the territory he stole at the cannon's mouth along their borders? Does he imagine that Australia will permit the Hun blight to fall again on the fair islands of the South Pacific? Can he for a moment fancy that Great Britain and France and Portugal will let him lay his foul, blood-soaked hands on African soil once more?

**Germany Should Be Made to Pay.**

New York, August 22.

Editor Manufacturers Record:

I have read with much interest and great pleasure in your Daily Bulletin of the 17th inst. your splendid articles on "Why Germany Should Be Made to Pay the Cost of the War to All Allies."

I commend your worthy and patriotic paper to the admiration of every loyal American citizen and our valorous Allies.

Here is a splendid suggestion couched in a fearless, manful and patriotic style. I subscribe strongly to its every utterance, and could my moral support be fashioned into a compelling force, Germany would be forced to make just, if bitter, retribution for the havoc she has wrought to civilization.

Such articles as you have been writing in your fine paper help in a measure to counteract the evil and malign influences of Hearst journalism, which is poisoning the minds of such of our civilian population unthinking and unfortunate enough to read these odorous leaves of yellow putridity.

Why don't some of you good, patriotic publications join the New York Tribune in its courageous and justifiable attack on Bill Hearst's foul sheets of sedition?

With best wishes for your fine policy and continued success, I beg to remain, Yours to win the war,

C. E. FORSYTHE.



his host over in Germany raise a whimper some will say "Let's quit and pardon."

God forbid! To hell with the whole bunch!

Excuse my rambling. But to return to my former thoughts. As to the evil that is lurking behind an organization that would resort to any means to beat justice; unless the people are willing to let the law take its rightful course, and unless we can have lawyers that will not resort to any means to gain their end, we are in a fair way to a bad state of government, and unless our politicians see to it that they consider the matter well before presenting them to the public instead of getting up before an audience and saying things just to please the people and to gain a vote, as they did last campaign, for which we are paying such heavy toll today.

For a long time the labor unions have been patted on the back for a vote, the result of which has brought an issue that has got to be solved, and solved rightly, or we will have greater disorders than ever before. Why our President could interfere in the Mooney case and give encouragement to such lawlessness is beyond my understanding. I am glad you explained the case so forcibly in your valuable paper.

The only pity is that your writings do not find their way into every home till the people might see the true spirit that should dominate the American people. I sometimes wonder what has become of our Christian homes where we gathered around the family altar and sought after Divine guidance. It seems we have all gone astray and lost the most essential thing to the welfare of a nation.

As ever, your well-wisher.

W. M. WEST.

[There is a Divine statement that "the nation which forgets God shall be turned into hell." Germany not only forgot God, but definitely sought to deny the divinity of the Son of God. We were in danger of following Germany, for prior to our entrance into this war Germany's atheistic teachings were spreading in our universities and even in our pulpits. This war may save us from the ruin to which we were headed under Germany's leadership.—Editor MANUFACTURERS RECORD.]

### Shall Decent Americans Ever Clasp the Blood-Dripping Hands of German Murderers?

Stuart, Fla., August 20.

Editor Manufacturers Record:

I thank you sincerely for the grand work you are doing to make the American public awake to the real truth about the German fiends and to realize our duty during and after this awful war.

You and your children and your children's children may well be proud of the work you are doing.

This is no ordinary war, and there must not be an ordinary peace-making. It is not enough to win the war, we must crush the Germans.

We are not fighting simply the German army, or the depraved people. We are fighting an inhuman, devilish system, cult, religion that must be utterly destroyed.

Whatever struggles or emergencies may be ahead of us, we are going to win, but how about the peace-making?

It is unthinkable that we should allow our representative to take the bloody hands of the fiends that deliberately debauched and drilled the German people into a horde of degenerate beasts of prey, who cast aside all international law and all humane customs and conventions and brought this horrible war on the world purely for purposes of loot.

Your statement of peace terms is very mild. What would have been wild unreasonableness in connection with any other war is simply a sober effort to realize the plain truth in an unbelievable situation. Is any American so vile that he would take the hand and reconcile himself with a fiend who broke into his home, outraged and then mutilated and murdered his wife and innocent daughters?

O. P. MAXSON, M.D.

### Peace This Side of Berlin Would Be Supreme Dishonor.

[Baltimore Sun.]

Our whole thought, our whole purpose, our whole will is "to war." Peace this side of Berlin would be supreme dishonor, infamy, sacrilege. The Lord do this and more unto us if we fail in this great work, if we fall short of the mark of our high calling!

### Let Him Pay.

[The Cleveland (N. C.) Star.]

The Star is inclined to agree with Mr. Edmonds of the MANUFACTURERS RECORD when he contends that Germany should be made to pay the costs of the war to all Allies. The United States has never gone into a war with a lust for property. It helped China in the Boxer uprising and accepted nothing but the thanks of that nation. It helped Cuba get her freedom, and placed not a cent of indemnity on Spain for the trouble. It set out in this greatest war in the history of the world to pay a long-standing debt to France and establish freedom, civilization and peace, but the more we learn about German burglars, those looters, those murderers, those destroyers of womanhood and childhood, the more we are convinced that Germany should be punished for years to come by levying an indemnity on the entire people for their part in the crime of trying to loot the world.

Mr. Edmonds says: "A prosperous Germany within the next quarter of a century would be a blot upon civilization and would show that civilization did not have the moral backbone and manhood to punish the criminal."

That's putting it pretty strong, but is it not true? Germany's war was for no principle; it is a definite, prearranged and predetermined war for the express purpose of conquering and looting the world. In this she was successful to a great extent until the United States entered the arena. She has issued \$30,000,000,000 in bonds, which her people bought because they expected that success would redeem these bonds and give them enormous financial profit by looting.

The American Defense Society has adopted the suggestion of the MANUFACTURERS RECORD that Germany should be compelled to repudiate its entire bonded issue and all currency issued to pay for this war. This would put Germany in a position to meet the enormous indemnities which the allied nations should exact. Should Germany win, she would most certainly make the allied nations pay. That was suggested in a German peace offer a short time ago.

But the Allies will win, and Germany and her co-fighters should be made to pay for every life lost, every dollar spent in the prosecution of this war and every piece of property she has destroyed. As the MANUFACTURERS RECORD's editor says, "unpunished crime begets crime, and an unbeaten, unpunished Germany would soon beget new wars and more horrors through the years to come. Germany should be penalized unto financial and military weakness for at least fifty years to come, and then its punishment would be all too mild."

### Our Chief Danger.

[The Raleigh (N. C.) News and Observer.]

With the swing of the war so decidedly in favor of the Allies the chief danger now is that we shall make such headway against Germany as to call out a proposal for peace. We should all of us clearly understand that we do not want peace, but surrender.

The murderer at the dock would gladly arrange peace. The fugitive from justice any place will agree to a peace. The thief, when caught, will gladly return the stolen goods and negotiate a peace if permitted, and be ready to go and steal again. Germany is already putting out feelers for peace, but a German peace can only be temporary. Germany will not abide by an agreement. She has already shown her contempt for a treaty, which she scorns as a "scrap of paper." Germany has disclaimed all responsibility and all reliability. To make a peace or any kind of a compact with Germany is to make a bargain with a liar and irresponsible criminal, and it is equivalent to a surrender to Germany because in it is nothing that can bind her.

A peace with Germany is a victory for Germany. It is a surrender to Germany. For it would bind the Allies to its terms and it would not bind Germany any further than would suit German pleasure. A peace is impossible, for it would give us nothing but the privilege of stopping war while Germany prepares for further aggressions.

Absolute surrender with the Allies dictating every condition and telling Germany what she may do in the future is the only end this war can bring and bring with it any gain to those who have fought against Germany. Until we can say what must be done with Russia, what must be done with the Balkans, with Poland, with Finland, and with Germany as well, it is surrender on our part to arrange for any cessation of hostilities. Germany has avowed it as her right and her intention

to make war, to conquer where she can, regardless of cause or provocation, but simply because she wants the wealth and the population and the resources of other nations. She avows in public print her purpose to rob and murder, to steal from any nation that cannot protect her. She sets up her doctrine that whatever she can take by any means is hers.

The only way to get rid of this pest among nations is to overcome her emphatically by the only power she recognizes, and that is rifle power with no modification and no privileges. She must simply be subdued, like the outlaw, and given no voice whatever in her fate. She should be treated as a criminal, deprived of her weapons and her freedom and sent to a reformatory for a long period of years with a probationary sentence that will not permit release until she has shown a conclusive evidence of being good if set free.

### Praying for Our Enemies.

By HAL W. GREER, Laredo, Tex.

Last night I went to church and listened to the minister's opening prayer.

After beseeching God to bless our efforts "to make the world safe for democracy," and to guide and protect the armies of our Allies and ourselves, and to give them the victory of righteousness, he then said:

"And O, our Father, bless our enemies, and teach them the way of truth, justice and brotherly love."

This may be a fine Christian spirit, but I could not sincerely join in the unctuous "Amen."

From my point of view, the godless Hun, the impious Turk, the villainous Austro-Hungarian and the murderous Bulgar all deliberately planned and joined together to murder, ravish and rob the world, and the only way to teach them "the way of truth, justice and brotherly love" is to give them a dose of the same kind of hell they put into this war.

I don't want to think of God blessing them until they have unconditionally surrendered; have dismantled all their armament; have paid an indemnity that will rehabilitate all the countries they have devastated and every expense the Allies have incurred in defeating their perfidious turpitude; nor until every monarch and autocrat among them has been hanged and they have adopted a safe, sane, republican form of government; in other words, until they have in fact become civilized human beings, for one cannot sincerely ask God to bless them.

If it is necessary to bring about the above results for us and our Allies to have a large standing army in those countries, say 5,000,000 soldiers, then let's keep that army there and make the inhabitants pay all the expense of their upkeep. Afterwards, and when they are thoroughly civilized, I am willing to ask God to bless them; but until then let's give 'em hell!

[The Rev. Lyman Abbott recently in explaining why he would not pray for Germans said he might lie to his fellow-man, but he would not lie to God.—Editor MANUFACTURERS RECORD.]

### Tremendous War Activities of Texas University

Austin, Texas, August 24—[Special.]—It is stated by President R. E. Vinson of the University of Texas that that institution is now turning out graduates of the School of Military Aeronautics, School of Automobile Mechanics and Radio School, which it is conducting for the Government, at the rate of forty thousand a year. At a recent meeting of the Board of Regents of the University plans were adopted for enlarging the School of Automobile Mechanics and Radio School so as to accommodate eight thousand additional enlisted men. The university will erect additional barracks and other buildings at a cost of about eight hundred thousand dollars. The institution has already expended approximately \$650,000 in the construction of buildings and installation of equipment for these three Government schools. All of the instructors are provided by the University and the feeding of the students is also done by the institution.

When the proposed enlargements are made the University will be training young men in these vocational branches of the army at the rate of more than sixty thousand a year, President Vinson says.

Two big brick and concrete construction steel plant buildings will be erected at Sparrows Point, Md., by the Bethlehem Steel Co., in connection with its recently detailed plan to expend \$50,000,000 for additions, \$20,000,000 of this amount being advanced by the Government. The two buildings will each be three stories high and 1150 feet long by 272 feet wide, the contractor being the Deverell Spencer Co. of Baltimore.

August 29, 1918.]

## Regulations Covering Road Construction Issued by United States Highways Council

ALL WORK MUST BE APPROVED BY THE COUNCIL, EFFECTIVE SEPTEMBER 10, AND CONTINUING THROUGH THE WAR.

[Special Correspondence Manufacturers Record.]

Washington, D. C., August 23.

The United States Highways Council today made public its regulations, effective September 10, governing highway and street work during the period of the war. Federal approval is required for practically all highway construction.

"No manufacturer," the Council's announcement says, "will furnish any road building material until the project has been approved by the United States Highways Council."

The proposed work that should be first submitted to the United States Highways Council through the appropriate State highway department is defined as follows:

"All proposed highway, street, culvert and bridge construction, reconstruction, and maintenance involving: (a) the issuance of bonds; (b) the use of rail or water transportation; (c) the use of coal or oil as fuel; (d) the use of cement, brick, asphalt, oil, tar, crushed stone or steel (also sand and gravel where shortage exists) as highway material."

The announcement, marked Bulletin No. 1, is given herewith in full:

The United States Highways Council makes the following announcement with reference to policy and procedure as to highway and street work during the period of the war, effective September 10, 1918:

1. All proposed highway, street, culvert and bridge construction, reconstruction, and maintenance involving: (a) the issuance of bonds; (b) the use of rail or water transportation; (c) the use of coal or oil as fuel; or (d) the use of cement, brick, asphalt, oil, tar, crushed stone, or steel (also sand and gravel where shortage exists) as highway material, should first be submitted for approval to the United States Highways Council through the appropriate State highway department. Forms have been prepared for this purpose and a supply placed with each State highway department. No manufacturer will furnish any road building material until the project has been approved by the United States Highways Council.

2. The Council again urges that new highway and street construction be confined to the most essential needs. If this is done there will be a far greater probability that the work thus selected can be promptly and effectively carried through to completion than if an amount far in excess of the available facilities were to be undertaken.

The Council in passing upon the projects which come before it will give first consideration to maintenance with a view to conserving all the highways already completed, if possible.

Reconstruction will be favorably considered by the Council only where it is clearly established that maintenance is no longer possible except at prohibitive cost.

New construction will be given consideration by the Council in the following relative order of importance:

- (1) Highways and streets of military value;
- (2) Highways and streets of national economic value;
- (3) Unfinished contracts involving contractual obligations (incurred prior to April 5, 1918, where bond issue is involved) which may not be disturbed without serious consequences;
- (4) Streets and highways which although not of national economic importance are of such extreme local importance or the construction of which has progressed to such a point as to cause serious hardship if their construction or completion is postponed.

The Council is hopeful that the selective consideration of new highway and street construction by the township, county and municipal officials and in turn by the State highway departments will so materially eliminate the less essential projects as to make it possible for the Council to render active aid on the projects it approves. The aid contemplated will be in the form of such action by the other Government agencies

involved as will remove obstacles to the speedy completion of the projects.

3. By way of definition of highways of military and national economic value, the Council offers the following:

(a) A highway of military value is one used regularly for the transportation of military supplies in considerable quantity; for the movement as an established practice of army truck trains, or which is essential to the efficient operation of a military cantonment, post, or plant.

(b) A highway of national economic value is one which serves or will serve, if properly improved, directly to promote the welfare of the nation and not merely the local welfare. As examples, it may be stated that in this class would be placed (1) highways which although not directly used for military purposes yet serve to help win the war by greatly facilitating the output or movement of war munitions and supplies; (2) highways which can clearly be shown to relieve congestion on railroad lines in a territory which is actually in need of such relief; (3) highways which give access to or promote the output of natural products needed by the nation to a marked degree; (4) highways which further housing operations undertaken by the Federal Government or by other agencies with the approval of the Federal Government would justify at times this designation.

4. State highway departments are requested to give most careful consideration to each application on its merits in the light of the policy announced by the Council and to exercise the power of disapproval freely. Only the projects approved by the State highway department will be considered by the Council unless the department itself is in doubt and wishes a decision in the nature of a precedent.

5. The Council will shortly begin, in co-operation with the Office of Public Roads of the Department of Agriculture, and the State highway departments of the several States, the preparation of a program of road and street construction, reconstruction and maintenance throughout the United States for the working season of 1919. The purpose of the program is to obtain an approximation of the character and amount of street and highway work deemed essential in 1919, together with an approximation of the amount and character of financing required, the amount and character of the various materials entering into the work, the extent to which rail and water transportation will be involved, and the probable demands upon the labor supply. The preparation of the program in each State will be directed by the State highway department, and will cover all State, county, township and municipal highway and street work.

6. For the information of the State highway departments as to procedure, forms are attached as follows:

Form H. C.-3, application to United States Highways Council for approval of project. This form should be filled out and signed by the public officials who are seeking approval of the project, and should then be filed with the State highway department. If the State highway department approves the application, it enters appropriate recommendation and certification on the last sheet of the form and transmits the application in duplicate to the United States Highways Council. The application is then given a serial number and its receipt acknowledged. It is then considered by the Council and appropriate references made to the respective Government agencies interested. The applicant and the State highway department are duly advised as to action taken. Forms F. 1 and F. 2 comprise application for approval of delivery of bituminous materials and certification of the application by the State highway department. These forms have been superseded by Form H.C.-3, but may be used if so desired where only bituminous materials are required.

Form H.C. 4, schedule for use in submitting pro-

gram of proposed highway and street work during the working season of 1919. This schedule is to be made up in four groups; namely: (1) State, (2) counties, (3) towns, townships, or districts, and (4) municipalities. For each of these groups three schedules, respectively, construction, reconstruction, and maintenance, are to be submitted. Definitions of construction, reconstruction and maintenance, respectively, are given on form H.C.-4.

Announcement of June 20, 1918, a brief summary giving organization and purposes of the United States Highways Council, and showing the relation of various organizations represented on the Council to highway work.

Circular No. C. 8. 13, United States Railroad Administration, rules promulgated to govern car supply for stone, sand and gravel, showing conditions under which open top cars may be supplied by railroads and providing for application to the Directors of the Bureau of Public Roads, United States Department of Agriculture, where local car supply is insufficient. The representatives of the organizations mentioned in paragraph 5 of this circular comprise the United States Highways Council.

### NEEDED ROAD WORK NEGLECTED.

Government Has Not Taken Action to Insure Adequate Transportation for Winter.

In its tenth bulletin the Highway Industries Association, H. G. Shirley, secretary, 1410 H street N. W., Washington, D. C., says:

"The enormous amount of freight, supplies and men that will have to be handled during the coming winter to properly provide for the wants and increase of the army and those industries whose output are essential to the upkeep of the army will practically require the entire rolling stock of the railroads, and there will be a great deal of produce and other supplies that will necessarily have to be handled over the highways. The efforts that are now being made to put these highways in a condition to carry this traffic by the Government are practically nil. Restrictions are being placed on building those roads that are most essential to the welfare of the country. Therefore, this Association wishes to emphasize the great need for immediate action on the part of the Government to properly provide ways and means for keeping those highways open that are going to be essential and necessary for the carrying of supplies for the proper prosecution of the war; and providing a sufficient amount of fuel for domestic use, for if there is not a great effort put forth and greater activity along this line, the congestion that will take place during the winter months will far exceed that of last winter and the suffering and loss will be many times increased."

It is also said that the United States Highways Council, Willard Bldg., Washington, is trying to formulate a plan for a working agreement with the Capital Issues Committee, with which it is in correspondence, looking to the financing of necessary road work.

### Doubled Its Advertising Bill.

The advertising policy of the Du Pont Company embodies suggestion and counsel of value to other industries throughout the land. For 1918 it doubled its expenditures as compared with last year, and yet it proposes to spend still more for publicity in 1919. Its advertising force of 200 individuals is quartered in a large office building devoted solely to this branch of the company's work. Seven years ago it had only 11 people employed in its advertising department. The present great force devotes its energies to advertising all of the various Du Pont products, more than 1000 in number, for its various plants make lots of things that have nothing to do with explosives, with the manufacture of which the company is commonly associated in the public mind. It has eight distinct branches of business and has recently added another by acquiring a large interest in the General Motors Company, manufacturers of automobiles. The company believes earnestly in publicity, notwithstanding that its various plants were never so busy as they are today and, instead of thinking, as some men have done, of curtailing advertising expenditures, it is liberally enlarging them with complete confidence that this policy is the one that pays.



**LOUISIANA SHIPBUILDING ACTIVITIES.**

Fifty-six Yards in New Orleans District Producing all Classes of Vessels.

New Orleans, La., August 24—[Special.]—Louisiana is building every kind of ship except warships. Shipbuilding is an old art here, beginning on the Teche-functa River over a century ago, where the first of the schooners were evolved that have made this region famous, squat hulls that plow the waves in fair weather and ride them in stormy, and later she devised the many-storied river steamers that were the glory of the past generation, and later still the small power-working boat, to carry commerce into the tiniest bayous and bring back the oysters and potatoes and other land and water foods.

Today Louisiana is building submarine chasers, wooden ships, steel ships, seagoing barges, concrete barges, etc., and soon may be turning out concrete vessels.

In the shipping board district of which New Orleans is virtually the geographical, as it is the financial and supply center, 36 shipyards are at work on large vessels, while 20 more are building schooners and small craft for home use. Along the Gulf at least 25 yards are engaged in work for the Federal Government, more than half in this district alone, a region that has timber enough to build the merchant ships of the world, iron and coal enough to supply it with battleships, and men sufficient to build and man them all!

At Violet, a suburb of New Orleans, the first steel ship ever built South was launched early this year. It is now on the sea, and another vessel has been launched while two others are building. One of the first, if not the first, wooden steamers ever built by the South was launched a year ago at Slidell. Over at Madisonville, on the Teche-functa River, a Ferris-type freighter has been launched and others are on the ways, soon to follow the Bayou Teche to the sea. At another yard in Madisonville the largest steel tug ever built South was recently completed. The Algiers naval station is turning out submarine chasers of the type on which falls most of the sea fighting of this war, as a French high commander recently said here.

But the factor that will put New Orleans farthest in the lead as a builder of ships is merely at its beginning, for when the industrial canal is completed New Orleans will have not only a short route to the Gulf, but 10 miles of shipbuilding sites. Even before the canal is finished New Orleans will have in full operation two of the largest and best-equipped shipyards south of Newport News.

**To Build Concrete Cargo Ships.**

Two 1600-ton dead-weight capacity cargo ships of concrete construction will be built at Houston by the marine department of the Houston Bank & Trust Co. These vessels are for the Pan-American Trading Co., and the Emergency Fleet Corporation has granted permission for their construction. They will be of combination cargo and passenger type, with capacity for 2000 tons of cargo and 50 passengers. Each will cost \$400,000 and be equipped with 500-horse-power Diesel-type motors for a speed of 10 knots per hour. They will be single-screw steamers, in accordance with regulations for a steam seagoing vessel of equal dimensions.

The company's shipyards are at the Houston terminals, on the Houston ship channel, 10 miles below Houston. This plant includes two end-launching and two side-launching ways, concrete mixers, sawmill, electric hoisters, unloading derricks, etc. The crude oil burning engines, which will be installed in the steamers, have been ordered from the McIntosh-Seymour Corporation of Auburn, N. Y. E. Lee Heidenreich, Sr., of the Heidenreich Engineering Co., Kansas City, Mo., is the consulting engineer of the marine department of the Houston Bank & Trust Co., and he designed these concrete ships.

**Big Contract for Pensacola Yard.**

Six steel steamships to cost \$10,000,000 will be constructed for the Government by the Pensacola (Fla.) Shipbuilding Co., this new contract having been received last week. Each of these will be 9000-ton vessels and brings the total of Government steel ships contracted for at Pensacola up to \$25,000,000.

**\$1,000,000 FOR SHIP PLATE MACHINERY.**

Baltimore Car Works to Manufacture Steel Shapes for Constructing Government Vessels.

Steel shapes for the construction of Government steamships at the Hog Island plant will be fabricated by the Baltimore Car & Foundry Co., subsidiary of the Standard Steel Car Co. of Pittsburgh, at its Curtis Bay plant near Baltimore. The machinery for manufacturing these shapes will cost \$1,000,000, and this equipment will be installed in the company's present buildings, including the main shop, 1650 feet long by 180 feet wide. It will necessitate the addition of 600 men to the 600 now employed.

The Curtis Bay plant intends to produce 10,000 tons of fabricated plates each month, besides continuing the construction of steel cars for railways and manufacturing explosive shells. It now has a daily capacity of 1500 shells, which are shipped to the Italian army. Only the shells proper are made, the trimmings being placed and the explosives inserted in Italy. Steel for the ship plates will be brought to Curtis Bay in the raw state and there cut into different sizes, rolled, shaped and punched with holes for the rivets.

Several buildings will be erected, but these will be mainly 500 dwellings for the additional men who will be employed, and a hotel. Sixty of the new dwellings are nearly completed and 60 more will be built within the next 30 days. The accompanying public utilities are also being provided for the families which will occupy these homes.

**New St. Petersburg Shipyard.**

Capitalized at \$250,000, the St. Petersburg (Fla.) Maritime & Construction Co. has been incorporated by R. L. West, F. E. Francke and W. H. Franklin.

**Shipbuilding Notes.**

The Emergency Fleet Corporation plans to build a shipyard for constructing 2500-ton wooden barges at Tampa. It is seeking a site on the waterfront, and the plant will employ 1200 men.

The American Shipbuilding Co., Brunswick, Ga., will build an addition to comprise facilities for the installation of machinery in vessels constructed for the Government. It has received a contract necessitating the erection of this plant.

During the past week the Foundation Company launched two mine-sweepers from its shipyard at Savannah. These vessels are the Rouvines and the Valmy, built for the French Government.

Ten additional shipways, a machine shop and a boilerhouse will be erected by the Union Shipbuilding Co., Fairfield, Md., to extend its facilities for building wooden steamships. The new structures will be of reinforced concrete and steel.

**Coal Production Still Far Below Requirements.**

The decrease in production which began after the record week of July 13 not only continued during the week of August 17, but the output during that week also fell below 12,000,000 net tons for the first time since June 22. Preliminary estimates by the United States Geological Survey place production (including lignite and coal coked) during the week of August 17 at 11,910,000 net tons, a decrease compared with the week of August 10 of 379,000 net tons, or approximately 3 per cent., but an increase over the corresponding week of 1917 of 1,597,000 net tons, or 15.4 per cent. Production necessary during the balance of the summer weeks to make up past deficit now amounts to 14,270,000 net tons, 247,500 net tons, or approximately 21 per cent., in excess of the average weekly production during the coal year to date.

The average production per working day is estimated at 1,985,000 net tons, a decrease compared with the average daily summer requirements of 92,000 net tons, or 4.5 per cent., but 269,000 net tons, or 15.4 per cent., in excess of the average daily production during the week of August 17, 1917.

Production of anthracite in the United States during the week of August 17 is estimated at 1,924,800 net tons, a decrease compared with the week preceding of 127,133 net tons, or 6.2 per cent., and a decrease compared with the current week of last year of 63,800 net

tons, or 3.2 per cent. The average daily production during the week of August 17 is estimated at 330,000 net tons, 4.5 per cent. behind the average daily production during the coal year to date and 2.8 per cent. behind the average daily production during the same period of 1917.

Total production for the coal year to date is estimated at 39,634,247 net tons, an increase over 1917 of 723,969 net tons, or 1.9 per cent.

The operators reporting produced 81.2 per cent. of the total estimated output, the mines being operated at 79.7 per cent. of full-time as against 82.3 per cent. during the week preceding. The limiting factor during the week was car shortage, the operators reporting loss of 9.8 per cent. of full time from this cause as against 7.1 per cent. during the week preceding. Slight improvement is reported in labor conditions, and slightly less mine disability existed during the week, while lack of market in the Rocky Mountain district caused slightly greater loss of time than during the week preceding.

Material decrease due to the shortage of coal occurred in Indiana, Ohio, Somerset county and Western Pennsylvania, High Volatile of Southwest Virginia, Fairmont and Cumberland-Piedmont. Decreases also occurred in the New River and Winding Gulf district. Improved transportation conditions brought about increased production in Illinois, Hazard and Northern Kentucky and Southwest Virginia.

Operating conditions in the by-product industry during the week of August 10 were not as good as the week preceding, a slight shortage of by-product coal causing the plants to be operated at 90 per cent. of their present capacity as against 91.5 per cent. during the week of August 3.

Operators in Illinois, Indiana, Kentucky, Maryland and Massachusetts report decrease in production. Factors limiting production in Kentucky and Massachusetts were repairs to plants; in Indiana, coal shortage; in Illinois, both repairs to plants and coal shortage, and in Maryland, other causes.

Improved operating conditions were reported in Pennsylvania and Tennessee.

The production of beehive coke in the United States during the week of August 17 is estimated at 581,000 net tons, an increase compared with the preceding week of approximately 1 per cent. The average production per working day is estimated at 97,000 net tons as against 96,000 net tons during the week of August 10.

**Marvels of Mechanical Genius in Creating War Industries.**

Washington, D. C., August 24—[Special.]—When the war is over there will be volumes written about the triumph of the mechanical genius in this country that has in a miraculously short space of time created new industries where none existed before. In announcing the completion of 19 out of 26 planned plants for the production of gun carriages and recoil mechanisms, the Ordnance Department of the Army has disclosed a marvelous record. Of the seven other plants, four are within 2 per cent. of being completed, another within 5 per cent., another within 10 per cent., and the backward within 15 per cent. of being ready to turn out material. This stupendous work has cost \$24,873,336 up to the 22 of August.

The problem of gun carriages is far more difficult than that of forging and machining of cannon. An idea of the complexity of this new industry may be had from the fact that the carriage for the 240 mm. Howitzer is made up of 6000 separate pieces, excluding rivets, while the carriage for the 155 mm. gun has between 3000 and 3500 individual pieces, exclusive of rivets. Two companies are producing this carriage. One formerly made steel passenger cars, the other hoisting and mining machines. There are three types of gun carriage for the famous 75 mm. Four plants now produce these. One is a Government arsenal, one was an ordnance plant before the war, one manufactured airbrakes and another automobiles.

The secret and most vital part of any artillery gun carriage is the recoil system, called by the French the "brake." Every French gun carries on the side of the recoil this admonition, "be good to your brakes." Before the war this country had no facilities whatsoever to produce the recoil. Now these are made by a sewing machine company, an elevator company, an automobile manufacturer and a Government arsenal. The Government will now be able to send enough mounted big guns to back up its soldiers as it sends them across.

August 29, 1918

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(Supplement Manufacturers Record, August 29th, 1918)

# ON TO BERLIN

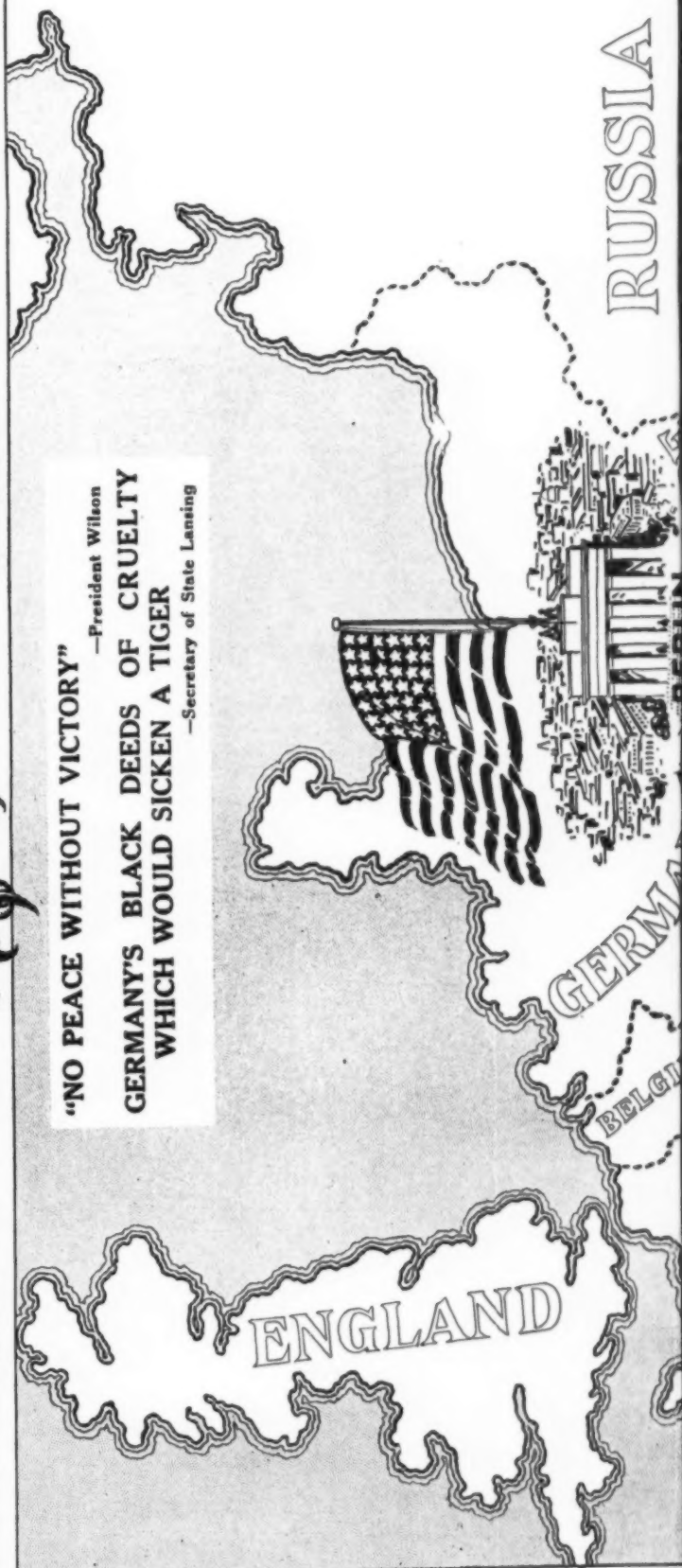


"NO PEACE WITHOUT VICTORY"

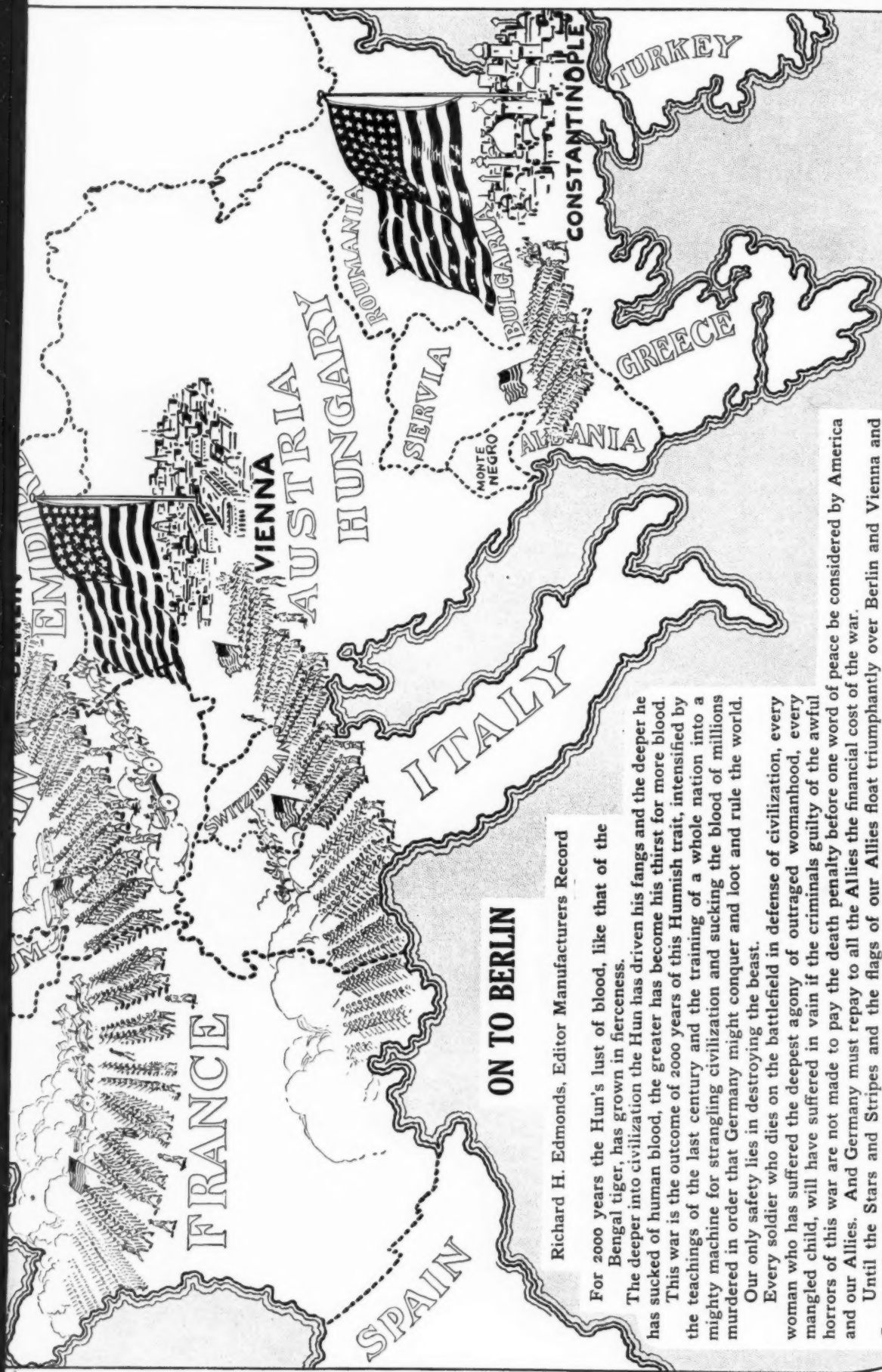
—President Wilson

GERMANY'S BLACK DEEDS OF CRUELTY  
WHICH WOULD SICKEN A TIGER

—Secretary of State Lansing







## ON TO BERLIN

Richard H. Edmonds, Editor Manufacturers Record

For 2000 years the Hun's lust of blood, like that of the Bengal tiger, has grown in fierceness.

The deeper into civilization the Hun has driven his fangs and the deeper he has sucked of human blood, the greater has become his thirst for more blood.

This war is the outcome of 2000 years of this Hunnish trait, intensified by the teachings of the last century and the training of a whole nation into a mighty machine for strangling civilization and sucking the blood of millions murdered in order that Germany might conquer and loot and rule the world.

Our only safety lies in destroying the beast.

Every soldier who dies on the battlefield in defense of civilization, every woman who has suffered the deepest agony of outraged womanhood, every mangled child, will have suffered in vain if the criminals guilty of the awful horrors of this war are not made to pay the death penalty before one word of the war and our Allies. And Germany must repay to all the Allies the financial cost of the war.

Until the Stars and Stripes and the flags of our Allies float triumphantly over Berlin and Vienna and Constantinople, he who suggests a peace by compromise, or that Germany should not be punished, is a traitor to civilization, a traitor to the heroes who have died, a traitor to womanhood and childhood, it matters not what specious pleas he puts forth, nor whether he stands in the pulpit or sits in the pew, whether he be in public or in private life. **ON TO BERLIN!**

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# Cost of Producing 1918 Cotton Crop as Figured by Texas Agricultural Department

[Special Correspondence Manufacturers Record.]

Austin, Tex., August 22.

The farmers of the South are encouraged to hold the 1918 cotton crop for a minimum price of 35 cents in a report made to the State Farmers' Institute assembled at Waco, the report being made by a committee named by Fred W. Davis, State Commissioner of Agriculture and President of the State Farmers' Institute. This committee has made investigations regarding the cost of producing this crop and the net results of its finding is the recommendation to hold for 35 cents. The complete report follows:

## Cost of Producing the 1918 Cotton Crop.

By the Department of Agriculture of Texas.

The first and most important step in determining and maintaining the price of any commercial product of mine, factory or farm is finding the cost of production.

There are but few people who desire to see the producers of any needful product sell such product for less than cost of production, with a reasonable profit. This is specially the cost with a farm product. They all realize that they depend upon the soil for their existence; that the soil must be kept in good productive condition if the needs of the world are supplied, which can not be done unless the products bring to the producers a profit above cost of production.

The trouble seems to be that many think a farmer does not need any money, and that a garden will make him a living; that it costs but little to grow crops, because they have been sold so cheap in the past, and the farmer continued in the business. Especially is this true with respect to cotton.

The farmers of the South have had the native grass, timber and other natural products, as well as a virgin soil, to aid them to exist in the past on low prices, but these are gone. The soil is fast wearing out, which calls for a high grade of intelligence and education to build it up and maintain it. To attract this class of men to the farm, or keep them upon it, or to any other vocation, there must be business methods used in its business operations and a profit in the products produced.

On account of the belief that it costs but little to produce cotton, and to overcome this seeming prejudice, the Department of Agriculture of Texas placed blanks in the hands of several hundred farmers in all parts of the State last fall and spring, containing a space for every kind of work that was required and every kind of expense incurred in producing this crop. They were filled out as the work was done, eliminating as much guess as possible.

The crops have been laid by and the blanks returned and worked up. The result of these records is the basis for the following figures on the cost of this crop. We hope they are explicit enough to expel any idea from the minds of the fair and honest that cotton is all profit.

The value of farm products from a cost standpoint should, and we believe will, attract the attention of the people of this nation more seriously from now on until it is settled than any industrial problem she has had to deal with in many years. It is the starting point of national safety and future prosperity.

While the reports cover large and small farms, for convenience and brevity we have used the one-man, one-team (two mules) farmer. We find single-handed men cultivate from 20 to 30 acres of land in the eastern sections of the belt, while in the west they cultivate from 20 to 60 acres. The average over this belt is probably about 25 acres per hand. In order to expel all doubt as to fairness we are using the 40-acre man with 30 acres in cotton and 10 in food crops. This is also departing from the records we have, in that the average is 40 to 50 per cent. of the crop in food or feed crops, in place of only 25 per cent., as we are using. This would show a less amount of cotton produced per hand with a correspondingly higher cost. This division of the crop shows an average production per farm of 10 bales, while the average for the entire South is about six bales.

Every department of nation or State, university or

college, through their extension service as well as the public press and individuals, depict our bad rural conditions. The deterioration of the soil, the bad home conditions, and that of the schools, all point to the need of intelligence and education on the farm.

The urgent use of the county demonstration agent, the short courses in agriculture, the host of traveling speakers from all sources, only point to the fact that educated, intelligent men are lacking on the farm. These bad conditions are the result of this shortage of education and intelligence.

The farms of the South have educated and given business training to millions of young men during the past 40 years, but the low prices of cotton, the lack of remuneration for service of such men has driven them from the farm. They are being besought to return to and quit leaving the farm. It is necessary that they do. Our soil must be cared for, as it is our greatest State and national asset.

Educated, intelligent men will not engage in or return to a business that is loaded down with weather and insect hazard, hard work and poor remuneration. There must be at least as much pay in an occupation of hard work where there is risk as there is in pleasant work with no risk.

Viewing the production of cotton in this way, we have placed the farmers' wage at \$900 for the year, and charge the cotton crop with three-fourths of his wages and the same proportion of all other expense incurred in the total crop.

This wage scale may not be high enough to encourage the class of men to remain on the farm or return to it that the conditions demand. If it is not, new adjustments will have to be made. Of course, after the war is over feed for teams, implements and many other things entering the cost of production will no doubt be reduced and better yields made, all of which will reduce the cost, and consequently the price. But the price must be such as will attract that class of men to the farm that can care for the soil and increase the yields. If this is not done the national decay of this nation, which has already begun, is sure to undermine its very foundation. It would be hard to find any local community in the South which has been in cultivation any length of time where 50 per cent. of the land in cultivation is half as productive as it was 25 years ago. It may be worth more on the market, caused by scarcity of land, but measured by its ability to produce it has deteriorated 50 per cent. This is an alarming waste that must be arrested and one which intelligence at the plow handle alone can do.

Counting the labor at \$1 per day for the actual day's work in production, with State and national figures on depreciation of farm equipment and 6 per cent. interest on the investment, the average cost per pound to produce cotton in the United States for the 25 years preceding the war has been 14.9 cents per pound, and the average price sold for has been 9.1 cents per pound. The results are a rural condition the traveler makes fun of and one we are ashamed of. The largest per cent. of tenantry of the nation, the largest per cent. of illiteracy of any section of the nation, less money per capita, less industrial improvement of any of the older sections, poorer schools, the worst worn soil of any section, consequently less appropriation for needful purposes. The further result is there has been no surplus during this time. No consumer of the raw or finished product has been unwilling for us to have cost of production and a reasonable profit. The fault has been our indifference and stupidity. There is a common enemy that is opposed to us so handling our cotton as to receive its value. Are we going to contend for our rights, or continue our stupidity?

This seeming alarm for a better price for cotton is not a war condition. Previous to the war many efforts had been made to relieve the situation, and many of the leading men of the South have been working to relieve it. It was not until 1915 when the Reserve Banking System was established that financial aid opened the door to the masses for relief.

The figures are made on a basis of 160 pounds of lint cotton per acre and \$70 per ton for the seed. Last

year the yield was 157 pounds per acre, and from the best information we can obtain we believe we are very conservative in basing the yield at 160 pounds this season.

The land is valued at \$75 per acre, and includes 20 acres of pasture land to each farm, which is below the average. The distribution of the expense is as follows:

No. 1—Man labor one year.....	\$900.00
2—Use and depreciation of team (2 mules).....	50.00
3—Feed for team.....	300.00
4—Interest on farm and equipments, 8 per cent.....	450.00
5—Depreciation on equipments.....	80.00
6—Depreciation on improvements.....	150.00
7—Blacksmithing and repairs to implements.....	20.00
8—Seed for planting 30 acres.....	30.00
9—Extra help in chopping.....	45.00
10—Extra help in picking.....	125.00
11—Ginning 10 bales at \$6.25 per bale.....	62.50
12—Storage, insurance and interest for 6 months on 10 bales.....	120.00
13—Fertilizer or plant food taken from the soil.....	150.00
14—Taxes and insurance.....	120.00

Total cost of crop.....\$2,602.50  
Less one-fourth of the cost that is devoted to feed crops.....537.50

Total expense to cotton.....\$2,065.00  
Less 4½ tons seed at \$70.....315.00

Net cost of 5000 pounds of lint at 35 cents.....\$1,750.00

No. 1 is the salary of a man and his wife furnishing a capital of \$5,000. The wages for a man, team and wagon has been more than this anywhere in the United States.

No. 2 is too reasonable to be questioned; while No. 3 only requires a little figuring of corn at \$2 per bushel and hay at \$35 per ton.

No. 4 is only 8 per cent. on a very liberal valuation. We find it averages from \$25 to \$250 per acre. The same quantity of land being worth \$200 to \$400 per acre in other sections where crops bring nearer their value, and what this land will be worth when cotton brings cost of production.

No. 5 is doubtful about covering the depreciation in the South and their value is here placed at a very low figure. The same may be said of Nos. 6 and 7.

No. 8 is known to be very little above gin run seed, while most farmers plant improved seed. Nos. 9 and 10 will not cover the cost except in dry sections or seasons. No. 11 is a fixed charge by the Federal Food Administration.

No. 12 is lower than the average rate. While many farmers may not store, they assume the risk, or whom ever they sell to does.

No. 13 is less than the average where fertilizer is universally used. True, some sections do not use fertilizer, but they are certainly consuming an equal amount of plant food.

No. 14 can be seen to be well in line by those paying State, county and school district taxes.

Last fall the committee appointed to find the cost estimated that it was well above 30 cents, with seed at \$800, and requested the farmers to hold for at least 30 cents, stating that while 30 cents would not cover the cost, it was nearer cost than cotton had been sold for in former years. We suggest 35 cents for this crop if \$70 per ton is received for seed, based upon the above figures of cost, and urge every farmer to refuse to sell for less.

The Government has arranged with the banks to loan farmers money on their cotton, where they must have it to meet their obligations to prevent a sacrifice or glutting the market. It will only take a few weeks of strong holding to advance the market to 35 cents. None should be sold on a declining market.

Some may think our figures on cost are high, but Mr. W. W. Morrison, an experienced Mississippi cotton farmer and cotton expert with the cotton brokerage firm of Herrmann & Wolf of New Orleans, places the cost at the same figures and the U. S. Government in its Bulletin 492 from investigations in 1913 places the cost on small farms where half a bale per acre is made at 13.84 cents per pound.

A yield of 160 pounds would have made the cost in 1913 21.5 cents per pound. If it cost 21.5 cents under 1913 conditions with labor at from \$10 to \$18 per month, corn at 60 cents per bushel, hay at \$10 per ton, and food as cheap in proportion, certainly there ought not to be any question about the cost of this crop being 35 cents with wages at three times as high and implements doubled.

There has been an effort made to place the cause of the high prices of cotton cloths mainly on the high price of cotton, which we desire to show is not true.

Let us first take a heavy grade of cloth, 8-ounce



duck, that which has advanced less in proportion to cost of manufacture than the lighter ones. Before the war the retail merchant paid 9 cents per yard or 18 cents per pound for 8-ounce duck (2 yards to the pound). Cotton was averaging 12 cents per pound. This left 6 cents per pound for manufacturing, selling and profit. Now, the retailer pays 40 cents per yard, or 80 cents per pound for it. If he has paid 30 cents for cotton it leaves 50 cents per pound for manufacturing, profit and expense of selling, which is 8 times as much as he received before the war, while he has only paid 2½ times as much for cotton. If he had only increased his manufacturing cost 2½ times, or 15 cents per pound, it would make a pound of duck worth 45 cents, which certainly would have been an extravagant profit, but above that he is getting an excess profit of 35 cents per pound, which is all we are asking gross for producing cotton.

The lighter fabrics, ginghams, domestic, flannels, etc., furnish an excess profit as high as twice this amount. We get these figures from reliable merchants. At before the war costs for manufacturing, and cotton at 30 cents per pound, 8-ounce duck ought to sell for 18 cents per yard; hence, all above that is extra to the spinning and dealing industry.

It appears to us that we have made our position plain and hope it will be accepted by all fair men, North and South. We are trying to look after the interest of a people who are unable to help themselves without aid and as citizens incidentally our own. However, if we have made any false statements or errors, we invite friendly criticism and a chance to correct them.

Respectfully submitted,

W. B. YEARY,  
D. C. DOVE,  
GEO. C. REEVES,  
J. C. HESTAND,  
D. J. NEILL,  
F. BLUMENTRITT, San Antonio,  
W. W. WOODSON, Waco,  
Pres. Texas Bankers' Assn.  
JOHN GORHAM, Waco,  
Pres. Tex. Farmers' Congress,  
J. C. WEBB, Seymour,  
B. L. SHIRLEY, Anna,  
J. M. HAGOOD, Cooper,  
JOE BULL, Hillsboro,  
Committee.

### Government Regulation of Louisiana Sugar Production.

New Orleans, La., August 23—[Special.]—Sugar buyers can buy Louisiana seconds and thirds for syrup-making without regard to the Food Administration's sugar allowance regulations. This is the Food Administration's solution of the serious low grade situation which threatened a loss of almost \$1,000,000 to the planters and would have deprived users in the United States of something like 12,000,000 pounds of sugar of this kind. And the International Sugar Committee, which is the sugar department of the Food Administration, has also let it be known that they favor the manufacture in Louisiana this fall of sugar of the higher grades for direct consumption instead of raws, and that the plantation granulated price will be based upon the standard granulated and not on the raw sugar price working upwards. A greater production of molasses is also understood to be the wish of the committee, which seems to be anxious to supply England with Louisiana molasses, it being understood that the English demand for molasses will be very big this year. Then the Committee on Sugar has gone further and in order to create a sufficient demand for Louisiana high grades and curtail the influence of refinery competition, they have announced that they will not allot any more foreign raws to the Louisiana refineries until January 1, by which time the Louisiana crop, it is thought, will have moved to the consuming points.

In making this announcement the committee gave out the impression that it was their intention to practically close the Gulf refineries except where they operated on Louisiana raws, and at the same time they urged against the manufacture of raws and strongly advocated the production of sugar for direct consumption. New Orleans will have to supply the zone in which it has been placed, by the creation of sugar zones throughout the country, with sugar from October through to January.

### Employers and Employees Must Unite to Settle Differences.

Washington, D. C., August 26—[Special.]—The National War Labor Board has rendered a decision in the controversy between the Smith & Wesson Company, arms manufacturer, Springfield, Mass., and their employees. According to Frank P. Walsh, joint chairman of the board, it is the most important case yet decided.

It has been the policy of many, notably the Smith & Wesson Company, to make restrictive personal contracts, which were undoubtedly lawful when made, but which are now contrary to the principles of the National War Labor Board, which holds that a restrictive personal contract is one "whereby a man is hired, promising in writing that he is not and will not be a member of any labor union."

Under the Proclamation of the President April 8, 1918, this point is clearly stated:

"The right of workers to organize in trades-unions and to bargain collectively through chosen representatives is recognized and affirmed. This right shall not be denied, abridged or interfered with by the employers in any manner whatsoever.

"The right of employers to organize in associations or groups and to bargain collectively through chosen representatives is recognized and affirmed. This right shall not be denied, abridged or interfered with by the workers in any manner whatsoever.

"Employers should not discharge workers for membership in trades-unions, nor for legitimate trades-union activities.

"The workers, in the exercise of their right to organize, shall not use coercive measures of any kind to induce persons to join their organizations nor to induce employers to bargain or deal therewith."

Another business policy that this company upheld, and it was not by any means alone in this, was the denial of collective bargaining. The War Labor Board's definition of this is: "It is a bargaining for wages and conditions in industry, negotiated by representatives of the employers and employees as a group." Many have confused this as a recognition of labor unions by employers, but employers may bargain with men whether they are members of a union or not.

The Smith & Wesson Company, until this award, adhered to the policy of refusing to meet at any time or place, singly or in groups, men in their own employ or outside, for the determination of the basic subjects of wages and conditions, and this was at variance with President Wilson's attitude as expressed at the convention of the American Federation of Labor at Buffalo on November 12 last. So, under the ruling of the War Labor Board, the workers, during the war, have a right "to bargain collectively through chosen representatives" with their employers. It believes that its labor policies will result in eliminating the great wastage due to labor dissatisfaction and unrest.

### How One Dollar Paid for Many Newspapers.

A very amusing and ridiculous experience at the recent meeting of the East Tennessee Press Association was the observance of the order of T. E. Donnelley, who has been appointed to a position in the War Industries Board, to the effect that publishers must eradicate from their mail list their entire lot of exchanges, and if we want a paper published anywhere instead of making an even exchange, as we have always done, we must now each pay to the other the cash subscription.

Another cruel and heartless part of the order is that we are ordered to discontinue all free copies to the soldiers, and if there is anything a soldier wants, it is to hear from home through his home paper, which contains more news than a dozen or a hundred letters from friends could contain. And yet we are forbidden to send any more free copies to the soldiers.

Well, to return to the doings of the association—the president gave a short talk on the order, and turning to the secretary sitting at the table with him said he wanted to continue receiving his paper, then to Bill Montgomery that he wanted his paper, and so on around the room, so he took from his pocket a dollar bill and passed it around to each member of the association, subscribing for their paper. This was continued by every member of the association until we all had renewed our subscription, so we will receive the exchanges just the same, and all of them will be paid for (?) in cash.—Athenian, Athens, Tenn.

### Utilization of Gas by Louisiana Municipalities Facilitated by New Legislation.

Baton Rouge, La., August 21—[Special.]—The Louisiana Legislature, during the extra session just closed, passed a law authorizing and empowering municipalities in this State to combine and co-operate with each other in the ownership, construction and operation of gas-pipe lines.

The purpose of the new law is to furnish ways and means for the cities and towns adjacent to the gas fields in Louisiana to get cheap fuel, and particularly to develop the Terrebonne gas district. The Terrebonne gas field was opened nearly a year and a half ago, and no community or concern is getting gas from the wells, with the exception of one sugar refinery. The city of Houma has granted a franchise to the McCormick interests to furnish gas to that place, but the pipe line has not been completed.

Investigation has disclosed the fact that the reason none of the cities in South Louisiana are getting gas from the Terrebonne field is that the municipalities and the gas companies have not been able to come to terms concerning franchises and the municipalities heretofore have not had legislative authority to combine with each other and build their own pipe lines. Local politics and rival interests have also had something to do with the delay in franchises and the piping of gas.

Passage of the new law will give the municipalities all the authority that they need to combine and co-operate in the ownership and operation of gas-pipe lines, and it is expected that several cities and towns will take immediate steps to build lines.

Not only is the Terrebonne gas unused, but there are many other idle gas wells in the State that can be put to use under the new law. There are gas wells in the Soto parish that have been capped for three years because the adjacent cities of Alexandria, Natchitoches and Boyce have been unable to build pipe lines through lack of authority. Now that the authority has been granted by the Legislature, the gas can be piped to where it is needed.

The new law is broad and far-reaching. It clothes municipal governments with authority to drill gas wells of their own if they wish to do so, and also empowers them to exercise the right of eminent domain in securing rights of way or to take over any existing pipe line.

### Government Plans Will Not Interfere With Chemical Exposition.

Rich G. Hollaman, president of the International Exposition Company, has been notified from Washington that in the event of Grand Central Palace, New York City, being taken over by the Government for war purposes, this action will not in any way interfere with the holding of the Fourth National Exposition of Chemical Industries, scheduled to be held in that building September 23-30. That portion of the building required for the exposition will positively not be taken over by the Government until October 1st or later, and therefore the huge exposition will have ended before that time.

Meanwhile plans have been under way for almost a year indicating that the exposition of this basically important industry will be the most interesting in history. Three available floors, covering nearly 100,000 square feet of floor space, will be replete with exhibits representative of every branch of the chemical and electrochemical industry, and the display will be interesting not merely to the chemists and scientists, but to the layman as well. There are hundreds of interesting things connected with the industry with which the public is not yet familiar, and yet these things are quite understandable when explained with display or by motion pictures.

For example there will be a motion picture film shown on Wednesday, September 25, revealing how potash, the basis of gunpowder, is electrically precipitated from cement. Lectures on the more violent explosives such as T N T, I N A, picric acid and nitrobenzol, will be given by Dr. Hough and others, and John W. Hornsey will speak during the exposition on how potash is being obtained from desert lakes and alunite. These are among the thousands of interesting things which will be revealed at the exposition.

Production of fuel briquettes in the United States in 1917 was 406,856 tons, an increase of 38 per cent. or 111,701 tons over 1916 production.

August 29, 1918.]

## Railroad Freight Rates and Classification as They Affect the South.

Mr. Frank Wilby, traffic manager of the Traffic Bureau of the City of Savannah, furnishes the Manufacturers Record with copies of letters recently written to Director-General McAdoo and to Mr. C. A. Prouty, director Division of Public Service and Accounting, United States Railroad Administration. Mr. Wilby's letters discuss matters of great interest in regard to freight rates and classifications to every business man in the South. In his letter to the Manufacturers Record he says:

The question as to ratings as shown in proposed Consolidated Classification No. 1 are of serious moment to every industry and business man of the South; also of equal importance to those having invested capital. We have been endeavoring to secure information from Washington as to what reasonably could be expected at the hearings in Atlanta and New Orleans.

I have enclosed copy of letter addressed to Mr. McAdoo, dated June 24. I have also enclosed copy of letter dated August 12 to Mr. Prouty. We have not had time to hear from Mr. Prouty yet. No response has been received from the Administration in answer to letters addressed to Mr. McAdoo dated July 24, 30 and 31.

The Manufacturers Record reaches the principal industries of the South. Every industry is interested in the outcome of what may be done in the consolidated classification case.

I respectfully submit these letters for such handling as you may deem necessary. It may be that you will consider them of sufficient importance for publication as the same questions as asked by Savannah applies to every shipper of the South.

In view of the importance of the questions raised and which are to be publicly discussed, the Manufacturers Record is glad to present Mr. Wilby's view of the whole situation.

Savannah, Ga., August 12.

Mr. C. A. Prouty, Director,

Division of Public Service and Accounting,

United States Railroad Administration,

Washington, D. C.:

Dear Sir:—From a reasonably long experience in transportation, and particularly with an experience of nearly 15 years handling classification matters for an association supported by transportation companies and having direct contact with every portion of the South and its business interests through reports and otherwise rendered by nearly 500 employees, with a payroll of nearly \$50,000 monthly, I addressed letters to Hon. W. G. McAdoo, Director-General of Railroads, dated July 24, 30 and 31, asking information as to hearings before the Interstate Commerce Commission in the proposed consolidated classification case.

The information asked for was in the name of the business interests of Savannah, which is, as possibly you know, one of the most important ports on the South Atlantic coast. While the information to Mr. McAdoo was not given, only by reference, that same was desired for consideration at a meeting to be held, yet the information asked for was also for use of the Southern Traffic League in preparation of such facts as should be considered needed for the protection of the shipping public of the South and to be utilized for preparation of facts for hearing at New Orleans on September 13 and in Atlanta on September 19. For some reason, no response whatever has been received to these communications.

As information beg to advise that on May 31 and June 1, 1918, a meeting of traffic men representing a large number of the important industries and municipalities of the South met at the Piedmont Hotel, Atlanta, for the purpose of giving consideration to the provisions of Mr. McAdoo's Order No. 28. The result of this meeting was that a committee was appointed to confer with the Railroad Administration having in view the securing of a modification in Order No. 28. On

arrival in Washington we ascertained that Mr. McAdoo was in Hot Springs. We had conference with Mr. Chambers and others. The result of the Washington conference was the issuance of supplement to Order No. 28, eliminating many of what was considered objectionable provisions. It was understood at Washington and from this supplement that rates should be increased 25 per cent. over rates of June 24 and no more; further, that question of classification should be eliminated. In other words, whatever classification was effective on June 24 should be the classification for movement of freight on June 25, whether the classification was intrastate or otherwise.

The committee of the Southern Traffic League expressed their desire to aid the Administration in securing all revenues that may be considered needed. Representing hundreds of millions of dollars invested capital, the committee went further in stating that they would do everything possible for the successful handling of transportation by the Railroad Administration. This statement was made in face of facts that, based on earnings of Southern lines, it was believed would have justified shippers of the South in opposing the increases as shown in Mr. McAdoo's Order No. 28 or supplements. At the meeting in Atlanta it was considered the part of wisdom and patriotism to assume a 25 per cent. increase in freight charges, although it was felt that the increase for the South was not warranted, than to take any action that would have resulted in causing a lack of confidence in the Washington Government.

The business interests of the South are not unmindful that in 1917 the transportation companies issued tariffs increasing rates 15 per cent. It is believed that you are as well informed as those in the South that the newspapers and magazines were used to a tremendous extent in propaganda work by the railroads, which resulted in many business men actually believing that the railroads would go into bankruptcy unless given the 15 per cent. increase. It may be known to you that those interested in industries and business insisted that the commission hear from shippers before the increase was allowed. The hearing resulted in a positive denial by the commission that the railroads of the South were entitled to the increase. This was a surprise verdict to many people when consideration was given to the propaganda that the railroads had published extensively as to bankruptcy, ruin, etc. The saving in freight tax was enormous, ranging as high as \$50,000 to \$100,000 per month or more to many important business centers of the South.

Notwithstanding what was considered by some as an understanding in Washington that rates should not be increased more than 25 per cent., a new classification is presented for adoption and to be used by carriers under Federal control. In letter dated July 24 we asked Mr. McAdoo:

"I am sure you will pardon us for asking if ratings have been suggested by employees of the United States Railroad Administration or have they been suggested by representatives of lines from whom the United States Government has leased the lines."

We received no response from the Administration. The question, however, is, as we understand, answered at the hearing before the commission in Boston on August 2. The Traffic World reports that Mr. Joe Colquitt, representing the commission, made Mr. Collyer say that he, Colquitt, had nothing to do with the ratings, that its ratings had been placed by the railroads themselves. In the same letter we asked:

"Had the Interstate Commerce Commission on behalf and in the interest of shippers and consignees checked proposed rules, regulations, minimum weights, carload and less carload ratings, with a view to ascertaining whether proposed ratings are of themselves reasonable for the shipping public?"

We have had no reply, but the fact remains that if ratings were adopted as shown in proposed classification No. 1, the increases would, it is believed, be ruin and stoppage to more than 90 per cent. of industries of the South and eliminate a similar number of business interests. It is in the minds of many that the application of ratings as provided in consolidated classification would make the raw products of mines and forests of the South practically worthless and drive industries of

the South to what are termed by transportation companies primary markets, which markets are usually in the East or north of the Ohio River.

The increases in freight charges over rates as now charged if consolidated classification was adopted would range from 30 to 600 per cent., or even higher. A statement covering 340 items shows the average increase to be 185 per cent. over rates as now charged.

It is true that Mr. McAdoo instructed the commission to have hearings at the following points:

Boston	August 1
New York	August 5
Chicago	August 12
Omaha	August 19
Portland	August 25
San Francisco	August 30
Denver	September 5
Fort Worth	September 9
New Orleans	September 13
Atlanta	September 19

and from these hearings report to the Railroad Administration their findings. If consistent, we would like to ask who Mr. McAdoo expects to attend these hearings? The South's industries are usually small; they are run on small capital; they have no working funds to be spent on hearings; besides, the average business man is not able to cope with the ability of transportation attorneys in rate and classification matters.

In the past it has been considered in some instances the part of wisdom and cheaper to quit business than for the average small business man to protect himself from the ruin of his business or industry or by unreasonable demands of transportation companies. It may be consistent to ask as to why a man should appear before the examiner in New Orleans or Atlanta, traveling possibly hundreds of miles and at great expense to himself, to protect an entire industry.

Was it not the intent of the law of 1887 that this was a government's duty, realizing that no individual should be expected at his own expense to protect industries, cities and even States from ruin caused from aggrandizement of those having invested capital in transportation companies. The commission has made repeated reference to these conditions in their reports. We feel that Mr. McAdoo would not expect a man with a small sawmill to travel hundreds of miles to New Orleans or Atlanta to tell an examiner that his freight on June 24 for 50,000 pounds of lumber for 100 miles was \$31.25 and that under proposed classification the cost would be for the same car on August 12, 1918, \$140, and that such charges would ruin his business and investment.

Would Mr. McAdoo think it required that a man having a graphite property should go to New Orleans or Atlanta to tell an examiner that under proposed ratings a car of low-grade graphite would cost for freight charges \$235 to haul 50,000 pounds 100 miles, and that on June 24 the cost for hauling the same car was \$25. Would it be the purpose that this man should prepare a printed brief to prove that an increase of 840 per cent. is unreasonable and would prove ruin and making his property of no value.

A man with a sand pit could ship a car of sand weighing 50,000 pounds 100 miles on June 24 for \$20. Under proposed consolidated classification ratings it will cost him \$116 for the same car. It is believed you will concede that it hardly requires testimony in Atlanta or New Orleans and printed briefs from sand men that 460 per cent. increase is unreasonable and that such an increase would make their sand property worthless.

Under a recent decision of the Interstate Commerce Commission, and after full hearing, \$25.50 was charges allowed for hauling 60,000 pounds logs for 100 miles. Consolidated classification ratings would make \$165 the proper charge. Would it be necessary for log men to offer evidence and submit printed briefs to prove that an increase of 550 per cent. on logs is justified?

To haul a bale of cotton 100 miles on June 24 was \$1.25. If ratings shown in proposed consolidated classification were adopted as being reasonable, it would cost \$3.55 per bale. The only reason that the Railroad Administration fails to hear from the farmer is caused from the fact that the farmer is not informed as to what is being proposed. This does not apply to cotton alone. The farmer is subject to tremendous increases on scores of other commodities.

It would be useless to cite further. It is possible to fill several pages of the MANUFACTURERS RECORD with increases that are equally absurd. It must be clearly understood that we are not criticising. It is felt that if full conditions as to changes in classification were known the proposed classification would not be tolerated as long as it takes to write this sentence. The railroads have been trying for years to have Southern classifica-



tion ratings adopted. In their appeal to the Railroad Commission of Georgia the transportation companies said:

"(c) The mileage rates in Mississippi are governed by the Mississippi classification, which is practically old Southern classification No. 25. About three years ago the Railroad Commission of Mississippi, after an exhaustive hearing, authorized the cancellation of the separate Mississippi classification and application of the Southern classification, with limited exceptions on intrastate Mississippi traffic. This authority was granted by an outgoing commission just prior to the time its term of office expired, and as soon as the incoming commission was installed an order was issued, without hearing, rescinding the action of the old commission and re-establishing the old Mississippi classification for application on intrastate traffic."

The Railroad Commission of Mississippi in letter dated April 7, 1916, advised the following particulars:

"Regarding the matter of classification in Mississippi. In 1911 the carriers petitioned the Mississippi Railroad Commission to adopt the Southern classification, in lieu of Mississippi classification, for application to intrastate traffic. The commercial organizations, learning that the matter was to be considered by the commission, filed protests and sent representatives to appear before the commission and oppose the change. The commission conducted an exhaustive hearing, in the course of which it was shown at that early date that by the adoption of Southern classification the carriers would make a large net gain at the expense of the shippers, and the change was not made."

Later, in 1911, it was learned that the railroads were again at work endeavoring to have Southern classification adopted. Representatives of the commercial organizations met in Jackson and sent a committee to confer informally with the commissioners, and, if necessary, to request a hearing before action should be taken on the petition of the carriers. The committee called on the commissioners, and being assured by them that no action would be taken on the matter, returned to their respective home towns and reported accordingly to their commercial organizations. Shortly afterwards it was announced through the newspapers that Southern classification had been adopted by the Mississippi Railroad Commission, this having been accomplished by the votes of two members who had been defeated for re-election. As soon as the new commissioners were installed in office, in January, 1912, the commercial organizations filed protests against the adoption of Southern classification and petitioned for the restoration of Mississippi classification, whereupon the commission gave notice to all parties in interest and another exhaustive hearing was held on the matter, after which the commission restored the Mississippi classification, and it is still in force."

Hon. R. Hudson Burr, chairman of the Florida Railroad Commission, said:

"Personally, I am unalterably opposed to the adoption of the Southern classification. When you do, you place yourself at the mercy of the Southern classification committee (which usually meets in Atlantic City), and that committee can, by classification changes, raise your rates at will, and your only recourse would be to make unheeded protest. This commission does not care to place itself in the hands of the Southern classification committee to practically make State rates for us."

In a recent letter to traffic men of the South representing municipalities, we said:

"In our opinion, a definite and fixed purpose as to classification and rules for the South should be adhered to by the Southern Traffic League, Railroad Administration, commissions of the several States, and by all trade organizations. There are, in our opinion, no conflicting conditions of transportation in the Southwest and Southeast as to require 89 different exceptions to Southern Classification No. 43. Such conditions are confusing to shippers and consignees, and are not warranted."

"The principal objections to State rates, classifications and rules has been from their multiplicity or lack of uniformity. There is merit in this contention; however, to remove the lack of uniformity does not require adoption of a classification having rules and ratings that would prohibit movement of freight and cause industrial stagnation and loss in property values in every State of the South. No doubt we would be told that such a condition is not desired by transportation companies; however, rates and classification as promulgated by lines at interest where State lines intervene should be

sufficient answer as to what could be expected if the protection of railroad commissions were withheld."

"Southern classification territory is substantially south of the Potomac, south of the Ohio and east of the Mississippi. To go before the Interstate Commerce Commission requires either acquiescence in what is presented or be prepared to present a solution of what is to the shipping public an unfair condition. Don't you think it advisable for the Southern Traffic League, in conjunction with Railroad Administration, the Railroad Commissions of the several States and in conjunction with the business interests through the boards of trade of all cities, whether large or small, to formulate a classification or exception sheet, having fair rules, ratings, storage, demurrage, reconsignment charges, etc., each State commission adopting the uniform classification as maximum State rates and requesting the United States Railroad Administration to adopt same for interstate business in Southern classification territory."

"If the transportation companies have been and are sincere in their clamor for uniformity, then they can reasonably have no objections to uniformity based on justice to shippers, consignees and those having invested capital."

The uncertainty of transportation charges is causing serious impediment to business. We are sure the Government does not desire such conditions to exist. The fairness of Mr. McAdoo is known to all. We are sure if conditions are true as enumerated in this letter that steps will be taken to protect the shipping public and not leave an unorganized shipping public to protect themselves as against one of the strongest organizations."

It will be realized by you that more than 95 per cent. of shippers do not know as to the unreasonable ratings and rules that have been suggested for adoption, and will have no knowledge until presentation of expense bills showing increased charges if it should be so unfortunate as to have proposed classification adopted."

With the tremendous facilities at your command, could we ask in the name of the shippers of the South and those having invested capital, that you take personal interest in this classification case, making comparisons of ratings actually paid today with those as proposed in consolidated classification. We believe if this investigation is made the hearings by the examiner will be useless as the administration will develop the unreasonableness of proposed rules and ratings. We would be very glad to have an expression from you regarding this very important matter, with a view to submitting same to the shipping interests of the South. This letter is based on provisions as shown in consolidated classification; that is, that Southern Classification No. 43, with exceptions, is cancelled, and that if Classification No. 1 is adopted that same will be used in place of State classifications and exceptions and for full use of carriers under Federal control."

Truly yours,

FRANK WILBY,

Traffic Manager.

Traffic Bureau,

City of Savannah, Ga.

Savannah, Ga., July 24.

Hon. Wm. G. McAdoo, Director-General  
of Transportation of United States,  
Washington, D. C.:

Dear Sir—We have received copy of Consolidated Classification No. 1, with advice that hearing will be held in Atlanta on September 19 as to reasonableness and propriety of descriptions, rules, regulations, ratings, etc."

Could we be advised what information will be desired by the Interstate Commerce Commission to make report to the Railroad Administration?

Is it considered by the United States Railroad Administration that rules, minimum weights, ratings, etc., as shown in Consolidated Classification No. 1, are just and reasonable to shippers, consignees and those having invested capital in industries, etc., and do these rules and ratings as shown meet the views of the United States Railroad Administration as being a reasonable basis for freight charges?

I am sure you will pardon us for asking if ratings have been suggested by employees of the United States Railroad Administration, or have they been suggested by representatives of lines from whom the United States Government has leased the lines."

Would it be the purpose of the Administration to eliminate use of all classifications, rules or regulations, State or otherwise, that are now effective and conflict with Consolidated Classification No. 1?

Is it the Administration's purpose to cancel excep-

tions 1 to 89 as shown on pages 266 to 437 Southern Classification No. 43, I. C. C. 22, and if it is not the intention of voiding exceptions 1 to 89, could we be advised if it is purposed to make any changes in exceptions, either as to application of localities as they now apply or by change in description or ratings?

Has the Interstate Commerce Commission, on behalf and in the interest of shippers and consignees, checked proposed rules, regulations, minimum weights, carload weights, etc., that are unreasonable, or is it the purpose to confine investigation to increases and changes in rules as shown in Consolidated Classification No. 1 over rules and ratings as shown in Southern Classification No. 43, the Administration accepting previous rules and ratings of Southern Classification No. 43 as being a fair basis of freight charges for all lines in Southern territory?

At the hearing in Atlanta of September 19, is it the purpose of the Administration to have evidence and exhibits filed showing all rules, ratings, minimum weights, etc., that are unreasonable, or is it the purpose to confine investigation to increases and changes in rules as shown in Consolidated Classification No. 1 over rules and ratings as shown in Southern Classification No. 43, the Administration accepting previous rules and ratings of Southern Classification No. 43 as being a fair basis of freight charges for all lines in Southern territory?

It is no doubt known to the Administration that Southern classification ratings on many carload shipments and on heavy commodities are not suitable for movement. The removal of State classifications and exceptions to classification may prove ruin to the business of many and is believed would result in the closing of industries."

We feel that you realize the tremendous consequences from classification changes. A freight scale can be increased a few cents without material injury, while classification changes work untold hardship. To illustrate result of classification change, if classification as shown in Consolidated No. 1 on plow irons were adopted, the increase ratings in Georgia for 160 miles less than carload, would be 265 per cent., and 204 per cent. for carloads over rates as charged on June 24 a greater percentage difference would apply between many other points."

The hearing by the commission will prove of benefit to cities and industries who are financially able to protect themselves by representation. More than 98 per cent. of all shippers and consignees will not be represented; in fact, they will have no advice as to pending changes until presented with expense bills showing increased charges. The average industry of the South is small; they are doing business on small capital; they are not able, financially, to appeal to the Interstate Commerce Commission and subject themselves to the long delays for rulings. The result is the business is closed down, proving of injury not only to the man directly, but affects the prosperity and livelihood of many."

In justice and fairness to every citizen, would it not be the right of the Government, and at the Government's expense, to place a shippers' representative on each of the classification boards? It could hardly be considered equitable that any individual or firm should go to the expense and protect the transportation rights of cities, industries, and even States."

I am sure you will pardon me for the suggestion; however, the suggestion is based on an experience in classification matters possessed by few."

We would be glad to have information requested promptly. Thanking you in advance for favors advised."

Truly yours,

(Signed) FRANK WILBY,

Traffic Manager.

### War Oil Pipe Line for Oklahoma.

Outlining the plans of the War Oil Pipe Line Co., Drumright, Okla., for building an oil pipe line reported to require an expenditure of \$3,500,000, the Sinclair Oil & Refining Corporation of New York writes to the MANUFACTURERS RECORD:

The War corporation will build a pipe line, under eight and six-inch pipe, for a distance of 200 miles paralleling a portion of the Drumright to East Chicago pipe line of the Sinclair-Cudahy Pipe Line Co. The contract for the pipe has been awarded to Baeth & Flinn, Limited, Pittsburgh, and construction will be by that company under the supervision of the Sinclair-Cudahy management. Orders for the machinery have been placed and the necessary buildings will be erected by the Sinclair-Cudahy Pipe Line Co., John R. Manning, engineer in charge. J. C. Hoot, Conway Building Chicago, will give consideration to proposals for finishing fittings."

August 29, 1918.]

# The Tragi-Comedy of Herr Thyssen

We believe no daily paper in America has surpassed the Christian Science Monitor in ability to get at the inside facts about European affairs since the beginning of the war. The Monitor, it should be remembered, deals but little with the doctrines of the Christian Scientists, but is one of the recognized great leaders of clean daily journalism in the whole world. Its foreign news is conspicuous for its fullness and accuracy. Hence a recent editorial which throws some new light upon the business activities of Herr August Thyssen, whose revelations as to the turpitude of Germany we recently published in pamphlet form, under the title of "The Most Damning Revelations of Germany's Turpitude Ever Published" will be of interest. Editorially discussing Thyssen and his amazing revelations, the Christian Science Monitor had the following.—Editor Manufacturers Record.

At a moment when every conceivable thing that can be imagined is being done to enable Germany to escape the penalty of first provoking the war, and then fighting it with an utter disregard for the law of nations or the dictates of humanity, it is doubtful if too much can be said of the nature of the original offense. Pacificists and pacifist Socialists all round the world seem, for reasons not at all unfathomable, to have thrown their eggs over the modern Attila, and to be engaged in endeavoring to prove that Germany's entrance into the war was due quite as much to allied diplomacy as to the teachings of kultur. Men like Mr. Ramsay MacDonald, in England, have preached this doctrine from a hundred platforms, and have left the world very little to choose between Dr. von Bethmann-Hollweg and Lord Grey, between General von Moltke and Monsieur Poincaré, or between the Kaiser and the Tsar. It is probably very little use appealing to the political bitterness and the mental perversity which has produced this point of view. But it is perfectly worth while to disclose to the public some of the things which seem to make no impression on the defeatist elements in the allied and neutral countries. In such an effort it may be necessary to refer not to new discoveries, but to ascertained facts; and it is certainly wiser to call as witnesses the spokesmen of Central Europe rather than those of the allied nations. Now, of all the Daniels that have come to judgment in this way there is not one who has exposed the iniquities of kultur with greater, even if unconscious, thoroughness than Herr August Thyssen, the Iron King of Germany.

In order, however, to understand something of Herr Thyssen's revelations it is necessary to know something of Herr Thyssen himself. Herr Thyssen, he it said, then, is a man whom it is common to call the captain-general of industrial Germany. What Alfred Ballin has done for its merchant fleet, what Arthur von Gwinner has done for its finances, what Emil Rathenau has done for its engineering, that, and all of that, August Thyssen has done for its steel, iron and coal trade. Half a century ago Herr Thyssen built, with a capital of 24,000 marks, a single rolling mill. Today the Rhenish-Westphalian Steel Syndicate and the Rhenish Coal Syndicate cover the world with their wharves and their shipping, their mines, their warehouses, and their iron works. Herr Thyssen, in short, in the days previous to the war, had taken hostages from Germany's enemies in the present war. From Caen, in Normandy, his ships embarked the products of the Westphalian mines and rolling-mills, and the castings from his furnaces at Montigny, in conquered Lorraine, for all parts of the world. At Nikolaieff, on the Black Sea, were his docks and warehouses. In Brazil, in one hemisphere, and in India, in the other, were the wharves and the docks to which his own ships brought the exports from far-off Germany. On the very eve of the war he had even laid his hand upon coal mines in England. In doing all this he was, of course, playing a great game which he enjoyed, for he had taken as his motto the words, "If I rest, I rust." But behind all this he had another great design. He was one of the millionaire internationalist traders and financiers, all of whom intended to make a new industrial heaven and earth in which the worker would obey the foreman as the private obeys the sergeant; whilst among those members of this international band who were Germans there was the further intention of hoisting the black, white, and red flag over a modern empire which was to reduce that of Alexander or of Genghis Khan, of Suliman or of Akbar, of Philip or of Napoleon to insignificance, and whose riches were hopelessly to outrival those of Sardinia, of Moorsheadabad, or even the fabled wealth of Aladdin's cave.

It might have been imagined that such success as he had achieved would have been enough for Herr Thyssen.

But, as President Wilson pointed out in a famous speech, the legitimate triumphs of Germany in the fields of commerce, of natural science and of empire were not enough. The morality of the whole nation had been so debauched by the teachings of kultur that it was open to any proposal, no matter how villainous. Such a proposal was now made, on Herr Thyssen's own showing, to himself, and made, no less than two years before the war broke out, by the Kaiser himself. In the year 1912 the Hohenzollerns, having come to the conclusion that a continuation of peace would be fatal to the military machine, determined to embark on a great war of conquest. In order to be successful in this, however, it was necessary that they should have the whole-hearted co-operation of the commercial community. In consequence of this a series of conferences was held between the Chancellor, Dr. von Bethmann-Hollweg, and the great captains of commerce and finance. Amongst the first to be approached was necessarily the Iron King, with the result that an offer of 30,000 acres in Australia, and a loan from the Deutsche Bank of 3,000,000 marks at 3 per cent. to enable him to develop this Australian property, was made to Herr Thyssen. At the same time, Herr Thyssen cynically explains, a syndicate of twelve great firms was formed for the exploitation of Canada. The capital of this syndicate was fixed at 400,000,000 marks, half of which was to be found by the German Government. In addition to this, great promises were made which were to take effect upon the conquest of England. The promoters of the Bagdad Railway had been given the choicest estates along the line, with the result that travelers to this day have their attention attracted by the mansions which have already grown up between the Bosphorus and the Cilician Gates, and between these and the capital of Haroun-al-Raschid. In England these mansions had been built for the German super-man centuries ago. There were Chatsworth and Longleat, Badminton and Knowle, all waiting for German princes, viceroys and field marshals.

When this idea was first put to Herr Thyssen he felt somewhat doubtful as to the soundness of the speculation. In other words, he, from the very first, doubted the security. He allowed himself, however, to be persuaded against his will at one of the select gatherings, held in 1912 and 1913, to listen to the Kaiser himself pouring out in the most "flowery" language the schemes of the German High Command for the new empire. Over the prospect of the conquest of India the Kaiser, according to Herr Thyssen, was peculiarly enthusiastic: "India," he exclaimed, "is occupied by the British. It is in a way governed by the British, but it is by no means completely governed by them. We shall not merely occupy India. We shall conquer it, and the vast revenues that the British allow to be taken by the Indian Princes will, after our conquest, flow in a golden stream into the Fatherland. In all the richest lands of the earth the German flag shall fly over every other flag. I am making you no promises that cannot be redeemed, and they shall be redeemed if you are now prepared to make the sacrifices which are necessary to secure the position that our country must and shall occupy in the world. He who refuses to help is a traitor to the Fatherland; he who helps willingly and generously will have this rich reward."

So, at the voice of the tempter, Herr August exchanged the doubting spirit of Thomas for the avarice of Kasim Baba.

Unfortunately for Herr Thyssen, this was not the end of it. The victory of the whole earth was to have been won in December, 1915. But in December, 1916, the Chancellor began to have a new series of interviews with the shareholders in Germany's "place in the sun." Guarantees were asked from 75 of the leading business

men for 4,000,000,000 marks for the next war loan. Herr Thyssen had been put down for 4,000,000 marks, or considerably more than that promised little advance from the Deutsche Bank. When he explained that he must decline the honor he was favored with a private visit from Dr. von Bethmann-Hollweg's private secretary, who explained to him that if he failed to subscribe he would lose his war office contracts. The indignant Herr August, who had been willing to subscribe to the world lottery in which he was to gain that Australian estate, had the temerity to describe the demand of the Chancellor for a subscription to the new war loan, under threat of something worse, as "blackmail." As a result he lost not only his contracts, but the greater part of his business, which was taken over from him, he complains, at a figure that meant confiscation. Thus, as Mr. Robert Burns says:

"The best laid schemes o' mice and men,  
Gang aft a-gley."

In short, that little investment in Australian land seems to have upset one of the greatest businesses in the world. Or was it the resistance of a Belgian general, in an antiquated fort at Liege, or a British general rallying an exhausted regiment by beating a child's drum 'round the grand square in Namur? The moral of the story, anyway, is none of those things. It is that the effect of kultur on the human consciousness is not to horrify the abused victim with its immorality, but to infuriate him by its failure to make good.

## Native Sumac for Tanning.

Washington, D. C., August 23.—[Special.]—Wild sumac, which grows abundantly in the Southeastern States, and in nearly all of the region east of the Mississippi River, can be made a source of profit if the leaves are gathered and cured with care.

The Department of Agriculture has been investigating the question of gathering sumac, and the results will be published within a short time, so that a bulletin will be available containing helpful suggestions to gatherers and dealers.

The various varieties of sumac will be described in this bulletin and instruction given in the proper methods of gathering, curing and handling, so that persons may take up the work and enter into a more effective competition with the importers who derive their supplies from Sicily.

When properly handled, the domestic sumac leaf contains from 25 to 30 per cent. of tannin, practically as much as the imported variety. The low price prevailing during recent years, ranging from 80 cents to \$1.10 per hundred pounds, can be raised under proper management, the Department of Agriculture finds. The Sicilian sumac leaves, when carefully gathered and cured, sell for from \$2.50 to \$4 a hundred pounds in the markets of the United States.

Women and children on farms, it is said, can make good wages gathering sumac as a side line during the time from June to September. The cessation of the imports of Sicilian sumac, owing to the demands of the war on ship tonnage and the fact that the dye industry, which uses much sumac, is now in a more prosperous situation than at any time in history, having become firmly established in the place once held by the German interests, is believed to make the present a desirable time to encourage the handling of sumac leaves. The wild plant provides the tannin which is so necessary in dyeing and tanning, and requires practically no initial outlay, but merely care in harvesting the leaves and handling in the curing process.

## Government's Big Projectile Plant.

More than 1000 tons of steel have been manufactured from scrap metal in the foundry of the Government's big projectile plant at Charleston, W. Va., and this product will be ready for the finishing processes when the balance of the plant is completed. Some of the buildings are ready to receive machinery, and most of the equipment has arrived at the site on the Kanawha River. The foundry, the machine shop and the heat-treatment building are the three principal structures at present, their cost being \$200,000.

Various activities connected with this Government enterprise are continuing in accordance with the \$1,750,000 appropriation authorized in 1917 by Congress.

The importations of foreign sugar, chiefly Cuban, at New Orleans in the month of July, 1918, were valued at \$2,841,532. Molasses imported in the same month was valued at \$110,505.



# Food Must Win the War: Interesting Activities of Tennesseans

By A. B. SOWELL, Columbia, Tenn.

We who say that "food will win the war," do we contribute that much of the civilian's part as will compare with the soldier's contribution to the winning of this war? Little effort is involved in the mere proclamation by various individuals that "food will win the war," but consistency in this regard is a virtue yet in its swaddling garb. Especially is this true in sections where food essentials are indigenous to those respective sections and the abuse of regulations that have been suggested to remedy the situation is growing more appalling. The situation may be attributed to thoughtlessness as much as anything else, for certainly the preponderance of data setting forth the bare status of the impending food shortage would not permit of cold-blooded sneers from enlightened people.

The South is called upon to supply a commodity that holds priority over munitions. It is asked to produce sufficient food for its own denizens and conserve a sufficient quantity for our army and for our Allies. The South is equal to the task, and there is no alternative. The South accepts its share of the burden cheerfully and with full knowledge that a vast store of resources hitherto untouched may be commandeered.

But with all this knowledge at hand, there is a feeling that there are so many things militating against the South's ability that her possibilities are limited. For instance, there is undue alarm at the sugar shortage, and in many localities the idea is prevalent that the great supply of foodstuffs that will mature during the month of August cannot be saved because of the limited supply of this important commodity. If this element of our people will stop to realize that no ill-effects were experienced from a recent flour shortage, but that instead vast benefits were realized in that we learned to substitute successfully, the present situation would be solved. Even in Tennessee, thousands of gallons of preserves, jams, jellies, etc., hold the attention of busy housewives in normal times during the month of August. Sugar was used with never a thought of a limited supply. Now that this staple has been almost entirely eliminated from free use, these good housewives anticipate the loss of the much-cherished delicacies and give encouragement to the thought that famine is at hand.

As a matter of fact, American women never had a greater opportunity for asserting their culinary genius. Just as there is a substitute for wheat, certainly there is a substitute for sugar, and thanks to the splendid home demonstration agents who are spreading the glad tidings of substitutes. It is a proven fact that our own made-at-home honey will give the essential sweetness to preserves, and the chances are that the change will be all the more delightful. Then there is our corn syrup, of which there is an abundance. It, too, is capable of playing a definite role in the process of preserving and is justly entitled to the distinction deserving of the commodity that breathes the life of prominence as a war necessity. Let every available article of food be conserved. The time is coming when it will be needed, perhaps more than it is now. Winter is coming, and the ration of the soldier must be wholesome. Civil life must be fed, ammunition workers must have sustenance. Talk substitutes until you have convinced every living soul that America is equal to the task to which she has dedicated her lives and her fortunes.

Middle Tennessee, particularly Maury county, is entering upon a new era from an agricultural point of view. Vast and unlimited resources hitherto dormant will be marshaled for the great task of winning the war. The most potential gathering of food experts and food producers ever held in the State recently dedicated the Middle Tennessee experiment station, located at Columbia, in the heart of the farming and livestock belt of the State. Representatives of the State University, food experts from Washington, county food administrators, the Governor of the State and hundreds of successful farmers have just closed a serious conference at which time the State of Tennessee accepted from Maury county a tract of 650 acres, upon which will be established a demonstration farm where all the farmers

of the middle section of the State may have access to free instruction and be guided along the lines of intensive farming. Never in the history of the State has more good come of such a meeting, and never was a time more opportune for such a conference, and the keynote may be summed up in the terse phrase aptly said by Dr. H. A. Morgan, State food administrator, "the will to win."

Every phase of farm life was treated by experts, whose knowledge of their respective subjects has been broadened by the opportunity for research occasioned by the war. The farmer was allowed and invited to join in the discussion, and this feature proved to be of great value. Ideas were interchanged and experiences related that will be reflected in the crop reports of another year. Every farmer attended with the determination of learning something new, and the conference well served as a university training for the men on whose shoulders rests the important responsibility of feeding the world. New ideas were injected and better ways thought out for the increase in acreage and quality of the vast agrarian repertoire that must be worked out by the man on the farm.

County food administrators from every county in the middle division of the State were inspired by the message from their State director and that from Mr. Hoover's personal representative of Washington. Upon these men rests the responsibility of a patriotic service, that of executing the plethora of food regulations, and no man in the South has the situation more in hand or is more intent on the proper execution of the regulations than the director for Tennessee.

Maury county is peculiarly adapted to the location of an agricultural experiment and a livestock demonstration farm, and will be many times compensated for the gift of \$100,000 for the site. Every crop known to the temperate zone may be grown successfully, and for the reason that bluegrass is indigenous to the soil, the livestock industry is particularly profitable. The farmers of Middle Tennessee have the opportunity of visiting the station at any time for free instruction, and annual meetings will be held for the purpose of schooling farmers in new processes that may be developed during the year by one of their number as well as professors from the State University.

It is a step in the right direction and will materially advance the agricultural and livestock possibilities of that section of the South.

## New Orleans' Plan to Save Food and Money.

New Orleans, La., August 24—[Special.]—To work for the production, conservation and preparation of foodstuffs, and also to assist the farmers in marketing their crops, the Department of Agriculture and Food Conservation of New Orleans has been organized as a result of President Wilson's appeal last year for increased production of food. Mayor Behrman has been a leading spirit in the movement. Harry S. Armstrong is superintendent, and others engaged in the work are Mrs. Adele Stewart, supervisor of the municipal kitchen; Miss Marie E. Mohr, assistant; L. H. Martin, parish agent United States Department of Agriculture; Capt. B. K. Bankston and W. D. Clayton of the Louisiana Department of Agriculture. The annual maintenance appropriation for the department is \$4050, out of which half of the salary of the Government's parish agent must be paid. One phase of its work is expected to save the people of New Orleans \$6500 this year.

About 7500 gardens in backyards and on the grounds of institutions are under the supervision of Mr. Armstrong and his assistants, and it is stated that the 10-acre garden of the home for colored waifs is worth \$300 a month for the entire year, the cabbage crop alone totaling 20,000 head last spring, and it was all consumed by the municipal institutions at 5 cents a head, \$1000 being saved to the public treasury. This garden is producing practically all of the vegetables used at the House of Detention, the parish prison and the colored and white waifs' homes.

Every morning Mrs. Stewart gives free instruction

to classes in household economics at a model kitchen which has been fitted up. The classes include school girls as well as married women. Food values and preparation, canning, preserving and drying are the courses. The work has so expanded that Mrs. Stewart has opened branch kitchens in two other districts of the city, where she instructs classes at night, and she also gives demonstrations at intervals in the schools and market-places.

The municipal dehydrator has just been given its capacity tryout, with one ton of pumpkins preserved for winter consumption by the city institutions. Ninety-nine more tons will undergo the same process. Due to delay in getting certain machinery, the dehydrator was several months late in getting started, and plans to preserve the backyard garden surplus this year were consequently greatly cut, but next year this surplus will be put up from the first cabbage of winter. The use of the dehydrator, as well as the supervision of an expert to operate it, will be given free of charge to the public.

Several months ago the city department of agriculture started on ant-poison campaign. The Argentine ant costs the community a tremendous sum every year in sugar and other foodstuffs. The cost of ant poison to fight the pest is another big item in the collective expense account. So the department of agriculture conceived the idea of making government ant poison and selling at cost, which is less than half the retail price. It is selling 100,000 cans this year at 6 cents, a total saving to the people of \$6500.

## Failure of the Zone System.

[From Leslie's.]

Zone! The zone postal system is producing exactly the result the publishers had predicted. Increased prices of newspapers and magazines is the first result. A second result, which will be more apparent as time goes on, is reduction of income to the Government. When a price is advanced beyond all reason the effect is so to curtail use as to reduce income. This has already shown itself in the decreased revenue from postal cards since the price has been doubled. In England, penny letter postage, one of the great triumphs of peace, succumbed to the demands of war on June 2. England deplores even a temporary suspension of the cheap rate, because it is realized that the penny stamp held together the scattered bonds of kinship and acquaintance throughout the far-flung British Empire, just as in the United States the low-cost newspaper and magazine have been the most powerful influence in driving out sectionalism. The experience of President F. G. Bell of the Southern Newspaper Publishers' Association is typical of how the new law is working out. Mr. Bell says it cost his office \$4 to determine what part of his paper was subject to penalty postage for the advertising section; that Government clerks put in \$8 worth of time to verify the report, and that after this \$12 expenditure it was found the Government was entitled to \$1.04 additional revenue! The zone postal law is a revival of a system abolished when Abraham Lincoln was President. Mr. Wilson, when Governor of New Jersey, showed the impropriety of again adopting it, as did also Mr. Hughes as chairman of the postal investigating commission in 1911. If this Congress doesn't realize the wisdom of repealing the zone law the next Congress will.

## Railroads Should Continue Development Work.

New Orleans, La., August 19—[Special.]—Continued financial support by individual railroads and by the National Railroad Administration of Southern land-development organizations was urged on B. L. Winchell, regional director of railroads, at a conference held in Atlanta August 12. Present were representatives of the Florida Cattle Tick Eradication Committee of the Southern Settlement and Development Organization, the Georgia Land Owners' Association and the Department of Cut-Over Land Utilization of the Southern Pine Association.

It was pointed out to Mr. Winchell that a common bond of interest exists between the railroads, the lumbermen and land-development bodies. With lumbering gone, the railroads of the South will have to look to other sources to make up their depleted tonnage. Land-development organizations are therefore a means for keeping on a co-operative basis the landowners and the railroads, whose interests are so closely associated.

# Will the Bolsheviki Lead America to Ruin or Will We Awake in Time to Save Ourselves?

Pascagoula, Miss., August 21.

Editor Manufacturers Record:

From time to time there has appeared in the MANUFACTURERS RECORD the statement that German materialism and atheism is responsible for the rapid growth of Nihilism or Bolshevism, or anarchy, that today threatens the destruction of governments and the social fabric throughout the world. The statement is correct, and there is at hand ample evidence to sustain it. Throughout all ages of the world there have been materialists and atheists, but the present materialistic propaganda, which has brought in prominence Nihilism and Bolshevism, is solely a German cult and the basic principle of its teaching is the destruction of all law and religion.

There are, in the first place, the psychological data of Nihilism. As the optimistic creed of the eighteenth century became the soul and spirit of constructive socialism, so the pessimism of the nineteenth century may be regarded as the presiding genius of social Nihilism. It is the philosophy of despair which suggests the death warrant of society, and ignores, if it does not entirely renounce, the hope of social regeneration. According to this philosophy, the world's sorrow can only be removed with the extinction of conscious suffering, and the world's redemption is synonymous with the world's destruction, and hence the extinction of social evils is sought in the annihilation of society, and social happiness is a social Nirvana. Crying social abuses, for which existing institutions offer no remedy, aggravate this 'maladie du XIX siecle' in Russia, and precipitate Russian would-be reformers, naturally prone to radical changes, into violent attacks, not only on the laws and institutions of the country, but also on the ethical conceptions, esthetic aspirations and religious convictions on which they rest.

A true diagnosis of Nihilism, then, as a disorder in the social organism, will discover some of its roots in the psychological conditions of the national mind, in a temporary derangement of the regulating functions in the body politic. And so we find the ruling classes at first intellectually dazzled by the Hegelian philosophy, then sympathetically drawn toward the pessimism of Schopenhauer, and latterly attracted toward the skeptical materialism of Moleschott and Buchner, have learned by degrees to surpass their teachers in realistic views of life and the utter denial of an ideal world. Indeed, it has been pointed out by a profound student of Russian character, that, psychologically, Nihilism is the outcome of two opposite tendencies in the modern Russian mind—the tendency towards absolute idealism on the one hand and cynical realism on the other, the former producing the wildest schemes of Utopian optimism, the latter the slough of despond of materialistic pessimism, and both together, though apparently self-destructive, becoming the fruitful source of daring speculation in politics and chimerical theories in economics, compared with which the most thoroughgoing schemes of social improvement in Western Europe appear almost reasonable in their impractical absurdity.

But it remains to be noticed that this psychological contradiction of two opposite tendencies in the Russian mind has been fostered by two concurring influences from without, the constructive socialism of France and the destructive socialistic criticism of Germany. Both Herzen and Bakunin, the leaders in the Nihilistic movement, were, like Marx and Lassalle, disciples of the Hegelian philosophy, and at the same time warm and enthusiastic supporters of the socialistic movements in France. So, too, Tschernyschewsky, the 'Karl Marx of Russia,' and the most popular modern exponent of Nihilism, imbibed his early lessons through his master, Belinski, with the Hegelian method, whilst among the 'Hommes de l'avenir' (men of the future) of the young Russian party, who regarded him as their prophet, the fusion between the Materialism of the modern German school and the Socialism of France has become an accomplished fact.

So writes Moritz Kaufmann, a German, in the Contemporary Review for 1880, and no man of his day was better qualified to speak on this subject. Later on in the same article he summarizes the teachings of the extreme socialist or nihilist:

"The more advanced part start with the negative theory of a complete subversion of society as now con-

stituted. Their program is: No more monarchy; no more State religions; no more landed proprietors; but the soil to be free as air, since everyone is entitled to sustenance; no more armies and administration—kings, soldiers, priests, judges, the rich and the privileged are all enemies of the Commonwealth, and as such to be resisted and exterminated. Every public functionary hostile to these designs is doomed to die."

In 1868 Michael Bakunin, the founder of Russian Nihilism, made a speech at Geneva, in which he stated the principles of Nihilism and their origin.

"Brethren," said he, "I come to announce to you a new gospel, which must penetrate to the very ends of the world. This gospel admits of no half measures and hesitations. The old world must be destroyed and replaced by a new one. The lie must be stamped out and give way to truth.

"It is our mission to destroy the lie, and to effect this we must begin at the commencement. Now the beginning of all those lies which have ground down this poor world in slavery is God. For many hundred years monarchs and priests have inoculated the hearts and minds of mankind with this notion of a God ruling over the world. \* \* \* Tear out of your hearts the belief in the existence of God, for as long as an atom of that silly superstition remains in your minds you will never know what freedom is.

"When you have gotten rid of the belief in this priest-begotten God, and when, moreover, you are convinced that your existence and that of the surrounding world is due to the conglomeration of atoms, in accordance with the laws of gravity and attraction, then, and then only, you will have accomplished the first step toward liberty, and you will experience less difficulty in ridding your minds of that second in which tyranny is invented. The first Lie is God. The second is Right. Might invented the fiction of Right in order to insure and strengthen her reign—that Right which she herself does not heed and which only serves as a barrier against any attacks which may be made by the trembling and stupid masses of mankind.

"Might, my friends, forms the sole groundwork of society. Might makes and unmakes laws, that Might should be in the hands of the majority. It should be in possession of those nine-tenths of the human race whose immense power has been rendered subservient to the remaining tenth by means of that lying fiction Right, before which you are accustomed to bow your heads and drop your arms. Once penetrated with a clear conviction of your own Might, you will be able to destroy this mere notion of Right. And when you have freed your minds from the fear of a God, and from that childish respect for the fiction of Right, then all the remaining chains which bind you and which are called science, civilization, property, marriage, morality and justice will snap asunder like threads.

"Let your own happiness be your own law. But in order to get this law recognized, and to bring about the proper relations which should exist between the majority and minority of mankind, you must destroy everything which exists in the shape of State or social organization. So educate yourselves and your children that, when the great moment for constituting the new world arrives, your eyes may not be blinded and deceived by falsehoods of the tyrants of throne and altar."

At Berne, Switzerland, December, 1868, Bakunin in a speech denounced the institution of marriage and then proceeded to say:

"It is impossible to destroy the superstition of religion by means of arguments or education. Religion is not only an aberration of the brain, but also a protest of human nature against the misery and narrowness of the reality by which we are surrounded. As man finds nothing in this world but injustice, stupidity and misery, he allows his fantasies to beget a new and better one. When, however, the earth again receives her due, namely, happiness and fraternity, then religion will have lost its raison d'etre. We need a social revolution to bring about its disappearance."

And again another Nihilist said:

"A German philosopher has said: 'Every law is of use. It rules the conduct of individuals who feel for one another and appreciate their respective wants. Every religion, on the other hand, is useless; for ruling, as it does, our relations with an incommensurable and

indefinite Being, it can only be the result of a great terror or else of fantastic imagination.' Now we Nihilists say, no law, no religion—Nihil."

The quotations given are sufficient evidence that Nihilism, or, what is the same thing, Bolshevism, is based upon materialism and atheism and is fed by German philosophy. I have already stated in the MANUFACTURERS RECORD, July 25, page 61, that the teachings of the American Bolsheviki and those of Russia do not differ in any essential particular; their basic principles are the same, and I need not recapitulate here, but it will serve to call attention to an important fact.

There is in New York city, or was some ten years ago, a society which published and distributed at minimum prices the works of D' Holbach, Buchner, Haeckel and others of that school who are extreme materialists, and who are avowedly inimical to religion. The works of the materialistic men of science are extensively advertised and widely disseminated, and it has become the accepted opinion with most men that all men of science are either materialists or atheists. They are not aware that there is another school of science represented by such men as Sir Oliver Lodge, J. A. Thompson and others, the teachings of which may be summarized in the words of Prof. D'Arcy Wentworth Thompson, C.B., of the University of St. Andrew, Scotland.

"With all the growth of knowledge," he says, "with all the help of all sciences of our own, it is yet manifest, I think, that biologists of today are in no self-satisfied and exultant mood. The reasons that for a time contented a past generation call for reinquiry, and out of the old solutions new questions emerge, and the ultimate problems are as inscrutable as of old. That which, above all things, we would explain baffles explanation, and that the living organism is a living organism tends to assert itself as the biologist's fundamental conception of fact. Nor will even this concept serve us and suffice us when we approach the problems of consciousness and intelligence and the mystery of the reasoning soul; for these things are not for the biologist at all, but constitute the psychologist's scientific domain. In wonderment, says Aristotle, goes philosophy begin, and more than once he repeats the saying, and more than once he rings the changes on the theme. Now, as in the beginning, wonderment and admiration are the portion of the biologist, as of all those who contemplate the heavens and the earth, the sea and all that in them is.

"And if wonderment springs, as Aristotle tells us, from ignorance of the cause of things, it does not cease when we have traced and discovered the proximate causes, the physical causes, the efficient causes of our phenomena. For behind and remote from the physical causation lies the end, the final cause of the philosopher, the reason why, in which are hidden the problems of organic harmony and autonomy and the mysteries and apparent purpose, adaption, fitness and design. Here, in the region of teleology, the plain rationalism that guided us through the physical facts and causes begins to disappoint us, and intuition, which is of close kin to faith, makes herself heard. And so it is that, as in wonderment does all philosophy begin, so in amazement does Plato teach us that all our philosophy comes to an end. Ever and anon, in the presence of the magnalia naturae, we feel inclined to say with the poet:

"These things are not of today nor yesterday, but ever more, and no man knoweth whence they came."

"I will not quote the noblest words of all that come into my mind, but only the lesser language of another of the greatest of the Greeks: 'The ways of His thoughts are as paths in the wood thick with leaves, and one seeth through them but a little way.'"

To what then does this argument tend? I have already shown that there is in this nation Bolsheviki who are spreading their propaganda, and that the fundamental concepts of their teachings are based upon materialism and atheism, the logical conclusion of which is anarchy. Editors and statesmen seem alike to overlook the fact that the laws of the physical world have their counterpart in the political and social world, and that throughout this universe, and in all ages, like causes produce like effects.

In 1905, shortly after Bloody Sunday in St. Petersburg, I wrote a prominent daily paper saying that a revolution was impending in Russia. My manuscript went to the waste basket and a few days later the editor, in an elaborate editorial, geometrically demonstrated that a revolution in Russia was impossible. Danton, Robespierre, Camille des Moulins, Marat and other leaders



of the French Revolution were atheists, and their philosophy was based upon materialistic and atheistic conceptions of nature and of life and wedded to an impracticable idealism. Such were also the fundamental concepts of Nihilistic teachings, and it did not require very great logical acumen to conclude that the causes that produced the Revolution in France would produce a like effect in Russia.

Moriz Kaufmann, following the same logical method, in 1880 reaches the same conclusions:

"The newly-infused hopes and increased liberties with higher civilization among the masses, and a more bracing culture among the classes, the partition wall of the caste system will be eventually broken down, and self-development from within will cause the nation to expand and to recover from its impaired growth after a complete elimination of existing impediments. Or the working of pent-up forces in the subterranean volcano will culminate in a powerful eruption similar to the outbreak of the French Revolution, and after a short season of vandalism and barbaric destructiveness society will recover."

Thirty-eight years have passed since Kaufmann wrote his masterly essay, Nihilism in Russia, and the events of 1917 have fully justified his logic and clearness of vision. One must be indeed very illogical if he cannot understand that the cause that produced the revolutions in France and Russia will, if not counteracted, produce a like effect in America.

The men that began and conducted the revolutions in England in 1640 and 1688 were not materialists or atheists, and their course is not marked with the carnival of bloodshed and anarchy that stains the annals of France and Russia.

CHAS. E. CHIDSEY.

### Busy Cotton Gins in Corpus Christi District.

Corpus Christi, Tex., August 20.—[Special.]—A department store rush in a big city is a mild affair to the demand that is now being made on the gins of Nueces and San Patricio counties.

At every gin in the two counties now in operation the scene presents a marked similarity. In many cases the gins are operating day and night, with long lines of wagons filled with cotton awaiting turns for the ginning of the staple.

At the Caldwell gin, Corpus Christi, yesterday there were 82 wagons filled with cotton. At the two other gins in this city similar scenes were witnessed, and the same condition is true at Robstown, Bishop, Taft, Sinton and elsewhere in the two counties.

With the biggest crop in history and the cotton opening fast on account of the continued dry and hot weather, the gins will have all the business that they can possibly handle for weeks to come. Many farmers believe that the crop in the two counties will exceed 75,000 bales.

To facilitate the ginning of the crop many of the ginners have announced that their plants will be operated on a seven-day-and-night basis until further notice.

### Ordnance Board on Metallurgical Matters.

The War Department authorizes the following from the Ordnance Department:

"In order to assure the more complete co-ordination of the various Ordnance Departmental activities along metallurgical lines it has been decided to establish a Board on Metallurgical Matters. The appointment of this Board will also assure the complete co-ordination of similar activities of the different divisions of the War Department and the War Industries Board.

"The personnel of the Board is as follows: Dr. G. W. Sargent, Engineering Division, Chairman; Lt.-Col. W. P. Barba, Production Division; Major A. E. White, Inspection Division, representing the Ordnance Department; Lt.-Col. F. B. Richards, of the office of the Assistant Secretary of War; Mr. L. L. Summers, representing the War Industries Board, and Mr. William H. Smith, representing the manufacturers.

"The Board will act not only for the various sections of the Ordnance Department, but also in connection with the manufacturers working for and with the department in the production of war material, and will gather the most recent and complete information on all metallurgical products.

Sawdust bricks for fuel are just now receiving close attention at the Forest Products Laboratory of the State University, Madison, Wis. The coal-shortage problem has caused a revival of interest in the possibilities of successfully briquetting sawdust and shavings so they will compete commercially with other fuels and thus aid in the relief work which may become necessary.

## News and Views from Our Readers

### The Heavy Decline in Cotton Condition in Texas.

C. F. DRAKE, Executive Secretary Weatherford Chamber of Commerce, Weatherford, Tex.

There has been so much misinformation in the daily press regarding the cotton crop outlook that the thought occurs to me perhaps you would appreciate a little direct information from the cotton patch. I have two acres in cotton, and have kept a close watch on it throughout the season. Early in June I marked 10 stalks of this cotton in different parts of the field. There are now not more than 10 grown bolls on any one of these 10 stalks. From each of the 10 stalks I have gathered up each day the shed bolls. These shed bolls are not just the little squares affected by the heat, but are bolls which vary in size from quarter-grown to half-grown and full-grown. The bolls thus shed average from 44 to 110, a round average of more than 60 to the stalk, which have fallen off after sound and healthy formation after June 10.

The latter date marks the period when the extreme hot weather began, and the longest drouth ever experienced in Texas in more than 30 years started. Since that date there has not been a day wherein the thermometer did not register above 100, frequently going to 110 and as high as 115, an intense dry heat which has literally cooked all vegetation. There has been no appreciable rain anywhere in the Texas cotton area since June 10. The ground is so extremely dry that it would take a week's rain and a penetration of moisture of not less than 18 inches below the surface to revive the cotton plant sufficiently to bring it back to life.

Now, if the cotton area of Texas has suffered as much as has my cotton patch, there will be mighty little cotton raised in the State, and I believe it has so suffered, for I have intimate and reliable reports from every section, and conditions are much the same. Contrary to the usual thing, bollworms are also at work in all the cotton in this section, and the depredation thus committed is heavy. Bollworms were never before known to depredate on cotton in dry weather. This constitutes a new menace, and its percentage of damage cannot be calculated on this crop until the whole crop is out of the field.

My deduction is this: If all the cotton area of Texas has suffered as much as my two acres, there will be a loss of at least 2,000,000 bales in Texas alone, and if the drouth in other States has been anything like as severe as it has been in Texas, then the yield will go below 12,000,000 bales and cotton will be a gold proposition intrinsically worth far more than 40 cents a pound. The man who has cotton to hold this year and does not hold it will be lacking in judgment.

The first bale of cotton brought in here this year came August 10. To get it (and it weighed but 567 pounds with bagging and ties counted in the weight) the farmer picked over 54 acres. Ordinarily he would have picked a 500-pound bale off less than 10 acres.

These are cold, hard facts, and you can form a fairly accurate estimate of what is to be expected this year. The crop now is too far gone and it is too near killing frost for the plant to come to life again, even with a flood, if a flood should come between now and September 15, the latter date being the last after which cotton can mature. If we should have a flood right now it would take the plant at least three weeks to recover its present weakened condition, begin to grow and fruit again, and that would put it past September 1 before it would begin making a new crop, even with a continuance of favorable crop conditions following such a flood, which is now improbable.

### Vast Potentialities of Virginia-Kentucky Coal Fields.

W. G. COUTTS, Big Stone Gap, Va.

When you realize that this is one of the greatest undeveloped coal fields in the world, and the coal trade of the whole world is thrown directly at the feet of this Virginia and Kentucky coal field, it need not surprise you to see big things happen. I am told that J. P. Morgan is fully aware of this coal trade opportunity, but he is very closely tied up in the financing and purchasing for the Allies just at this time.

Charleston, S. C., is the closest tidewater outlet, and one or two double-track lines with electric haulage, with

power generated at the mine mouth, are absolutely essential. Big Stone Gap is the natural gateway and metropolis for some 50,000,000,000 tons of Virginia and Kentucky coal.

There is some agitation on in Harlan to put up a fund of two cents a ton on the output for a big publicity fund to acquaint Wall Street with the facts about this big opportunity. W. E. Morrow, the secretary of the Louisville Board of Trade, has been to Harlan, Ky., and helped lay the foundation for a big peace preparedness in preparing to handle this world's coal trade the moment peace is declared.

We are all intensely interested in getting out every ton of coal possible to help win the war, and local publishers in this field are devoting much space to agitating and coaxing the miners to their greatest possible efficiency.

To show the spirit abroad in this field, I would cite you to Harlan county going seven times over her quota in her Red Cross drive. One miner alone loaded 25 tons of coal on Red Cross day, when ever miner in Harlan gave his day's work to Red Cross.

Truly the South has immense possibilities, but I challenge the whole South to show the immense money value of mineral resources, especially so as this coal will be thrown wide open for development to supply the coal trade of the world the moment peace is declared.

### The South the Nation's Greatest Asset.

A. A. CLARK, General Merchandise, Rosedale, N. C.

I enclose a clipping from the MANUFACTURERS RECORD that I put in my scrap book about ten years ago. It struck me forcibly at that time, and now, realizing the truth of the prophecy, I think it timely to reproduce it, if you see fit.

The clipping from the MANUFACTURERS RECORD which Mr. Clark sends reads as follows:

"Give free rein to your imagination and let it picture the future of a section which has one-half of the income of the United States, nearly three times as much coal as Great Britain, Germany and Pennsylvania combined, which holds a world monopoly on cotton production and is rapidly becoming a great cotton manufacturing center, which dominates the phosphate rock and sulphur trade of the world, which has much of the richest oil territory known, which has one-half of the standing timber of the country, which produces all the sugar, all the rice, most of the tobacco, and adds to these 800,000,000 bushels a year of grain; and then think of its water-powers, its splendid rivers, its great seacoast, its expanding commerce, and remember that its cotton crop alone annually exceeds the total gold and silver production of the world, and that every dollar of gold annually mined on earth is not enough to pay the South's bill against Europe for cotton, then you will get just a faint conception of the future."

### Considered an Essential Part of Business Organization.

INDUSTRIAL LABORATORIES, INC., Fort Smith, Ark.

We are in the market for large quantities of hard-wood ashes. Any information you could give us regarding available sources would be appreciated.

We take this method of expressing our appreciation for the most exceptional service which the MANUFACTURERS RECORD is to us. We consider it an essential part of our organization.

### Engineers and Surveyors Wanted.

The District Engineer, Charleston, S. C., wants three junior engineers or surveyors and six survey men for duty in connection with survey of Charleston harbor and its channel, for improvement to provide a channel 40 feet deep and 1000 feet wide. Apply to the District Engineer in the custom-house, stating experience, qualifications, age and draft classification.

### Manufacturing Gunsights and Binoculars.

Government contracts for gunsights and binoculars make it necessary for the Talbot Reel & Manufacturing Co. of Kansas City to double its factory, and contract for erecting an additional building has been awarded to Hoffman Bros. This structure will cost \$250,000 and be four stories high, 130 feet long by 112 feet wide. The Talbot contracts amount to several million dollars.

## Commendations, Kicks, Comments

### Considers It a Publication the Country Needs.

MAX GOLDMAN, General Manager Elk Gas Coal Co., Inc., Chesham, W. Va.—I am enclosing my check to cover subscription for the *Exponent of Americanism*, and beg to be allowed to express my views:

Every citizen should read your publication and digest the matter contained.

Every State official should be forced to read it every week; that is, the kind that I have read the criticisms of.

It is what the country needs—a publication that sets forth truths that are being smuggled up by some of the others, for reasons unknown.

It is educational to all. As enemy propaganda has been influential in the past, so your articles tend towards opening avenues of thought in the minds of many who did not have the view of this war as they should. And many yet need your preachings.

Further, allow me to congratulate you on the splendid information in your articles, and express the hope that I get them regular. I am interested in the coal-mining industry, and use the *MANUFACTURERS RECORD* often in getting out a weekly letter to every man in my employ.

By these weekly letters I endeavor to get the fullest co-operation of the men to increase production, and try to impress upon them the actual needs of the nation for winning the war.

I would like to see you over her quota, one loaded 20 ever miner in

### Would Discontinue German Language Not Only During War, But for Eternity.

E. W. MORE, Manager Trailer Sales Co., Atlanta, Ga.—We are just this morning in receipt of the *MANUFACTURERS RECORD* of August 15, and, among other items, notice your article headed: "Stop German Language and Papers in America."

I am enclosing you copy of my letter to the American Defense Society of New York, in which I beg to be enrolled as a member who desires the German language discontinued in every way, not only for the duration of the war, but for eternity, so far as America is concerned.

Your paper certainly echoes in every page the loyalty that should be in the heart of every one who loves America. We are very proud to be subscribers to the *MANUFACTURERS RECORD*.

One Issue Worth the Cost Per Year.

MORRIS ROBERTS, Roberts-Alexander, Engineers & Contractors, Argenta, Ark.—Please find enclosed my personal check for \$6.50, to cover subscription for another year of your valuable paper. One issue is worth more than the cost per year.

Kindly change the address to my residence, 720 Parker avenue, Argenta, Ark., this to enable my family to participate in the good it contains.

May God preserve Mr. Edmonds until long after this war is over, that he may be on "watch" and use his influence to prevent any form of peace except such as has been outlined in his editorials in the *MANUFACTURERS RECORD*.

Fighting for Civilization.

T. F. SANFORD, Sanford Bros., Chattanooga, Tenn.—It gives us pleasure to enclose herewith check covering renewal of our subscription for another year.

The *MANUFACTURERS RECORD* has earned the right to preferred place among periodicals received at this office, and with our hats off to Mr. Richard H. Edmonds we acknowledge our great debt of gratitude to you for the splendid fight you are waging in behalf of civilization and all of the things we hold dear.

In those days that tried the souls of many of us, and when it seemed we could never again look into the faces, for shame, of our friends across the sea fighting our battles for us, we will remember the part played by Richard H. Edmonds, and we unhesitatingly make acknowledgment of the lasting obligation we owe him in common with all good Americans.

Editorials Breathe the Spirit of Patriotism.

C. P. DUSENBUCH, Assistant Treasurer The Downing Company, Naval Stores Factors, Brunswick, Ga.—It is with real pleasure that we acknowledge receipt of the War Eagle Series of editorials which you have been kind enough to send to us.

These editorials breathe the spirit of patriotism, and are a beautiful example of the printers' art, and we shall see to it that they are carefully preserved or so distributed that they may, as you express it, "Continue to contribute in some measure to the winning of the war."

To Help Liberty Loan.

E. L. WILLIAMSON, President the First National Bank, Martinsville, Va.—I like your strong editorials. I am taking the liberty of having our county papers publish several thousand copies of "Give Until It Hurts, Not Until It Hurts," as printed in your issue of today. I will use this along with other literature in the next Liberty Loan campaign.

The Bache Review (New York) states that United States railroad securities totaling \$10,000,000,000 in value are directly held by 1,000,000 individual owners; \$1,550,000,000 by life insurance companies; \$547,000,000 by savings banks; \$649,000,000 by fire, marine, casualty and surety insurance companies; \$350,000,000 by colleges and benevolent institutions; \$405,000,000 by trust companies and banks.

## RAILROADS

### RAILROAD OPERATION LOST \$290,000,000.

#### Six Months' Result of Government Control—Increased Rates to Restore Balance.

Figures just made public by the Interstate Commerce Commission show that for the six months' period ended June 30 there was a decrease of over \$378,000,000 in the net revenues of railroads as compared with the same period of last year. For June alone the decrease was over \$72,000,000.

Operating revenues for the first half of the current year were \$2,081,448,000, or \$183,517,499 more than for the first half of 1917, but operating expenses this year for these six months totaled \$1,815,706,527, or \$461,694,818 more than in the same period of last year, so that the net revenues for the first six months of 1918 were only \$465,741,473, a decrease of \$378,177,319 in comparison.

The figures for June, 1918, with comparisons, are as follows: Operating revenues \$393,309,379, increase as compared with June of last year \$43,639,510; operating expenses \$425,096,305, increase \$189,514,459; net revenues \$41,786,926, decrease \$72,301,097.

But it is particularly pointed out by the commission that operating expenses for June, 1918, include wage increases representing back pay since December 31 last. If the increases were excluded, the operating expenses would be something over \$302,000,000 instead of \$425,000,000 for the month. This would make the operating income for June \$318 per mile of road, as compared with \$427 for the same month of last year, and as compared with \$376 per mile average in the same month for the years 1915, 1916 and 1917.

It is figured out that the Government has lost about \$290,000,000 in operation of railroads during the first six months of this year, but the increased freight and passenger rates are expected to reduce considerably or to wholly eliminate loss during the last half of the year.

The railroads themselves are already feeling the benefits of the advances and also of the order of the United States Railroad Administration placing all freight business on a practically cash basis. Thus receivers of freight are notified immediately upon the arrival of goods and they have only until the next day to check up the shipment on the freight bill and to pay for its transportation. The only credit which may be given is an extension of time of 48 hours in which to pay, and then bond must be filed with the railway to secure payment. This cash business since August 1, when the order took effect, has resulted in keeping the roads well supplied with ready cash, much to their advantage in meeting current needs.

#### Temporary Station for Munition Workers.

To provide adequate transportation facilities for several thousand women munition workers at the Seven Pines powder packing plant of E. I. du Pont de Nemours & Co., a large railroad station is to be built at Richmond, Va. While this will be a temporary structure, it will be in harmony with the city government's purpose of having all public service facilities as sightly as possible. The station, which will stand mainly upon property of the Chesapeake & Ohio Railway and the Southern Railway, will in some places cover Dock street, which it will abut upon for a distance of five blocks from 23d to 28th streets. As there will be at least 4500 women employed at this plant, it was found impossible to adequately handle such a crowd through the Main street station, so that provisions for the temporary structure were decided. E. S. Higgins, engineer for the Du Pont Engineering Co., is arranging for its construction. At Seven Pines the employees will have station facilities at a private terminal upon the powder company's property.

#### Proposed Improvement of Terminals.

An inspection of terminal facilities at Baltimore and in that vicinity was made last week by C. H. Markham, regional director of the United States Railroad Administration for the Allegheny Division, accompanied by L. W. Baldwin, assistant regional director; Elisha Lee, Federal manager of the Pennsylvania Railroad, and R. L. O'Donnell, general manager of the latter. The tremendous expansion of industrial activity in this locality, particularly at Sparrows Point, where the Penn-Mary plant of the Bethlehem Steel Co. is situated, makes

necessary some changes and enlargements of trackage, stations, etc. The inspection covered all the railroads at Baltimore, Sparrows Point, Curtis Bay and other important points in the suburbs. An early decision as to what will be done is expected.

#### Mexican Lines Rehabilitated.

Laredo, Tex., August 24.—[Special.]—According to a statement from the general offices of the Constitutionalist Railways of Mexico, there are now 6130 miles of that system in operation. Train service has been re-established on the Vera Cruz to Isthmus line and the Pan-American division, which runs from the National Tehuantepec road to the Mexico-Guatemala border, it is stated. There are a few divisions and branch lines that are still out of commission. The shortage of rolling stock interferes very much in the movement of traffic, but it is expected that this difficulty will be gradually overcome. The official statement shows that the gross earnings for May, 1918, were \$2,542,324 and for June \$2,800,615 in American currency.

#### \$400,000 for Shops at Richmond.

A contract has been let by the Chesapeake & Ohio Railway Co. to the Arnold Company, 105 S. La Salle street, Chicago, to build three shop buildings at Richmond, Va., at a total cost of about \$400,000. The principal building will be a locomotive shop 400 feet long and 110 feet wide, which will cost \$250,000. It will be of steel frame construction on concrete foundations. There will also be a machine shop 204 feet long and 43 feet wide, composed of brick on concrete foundations, with lean-tos, sheds, etc., all costing \$100,000. Lastly, there will be a brass foundry 244x53 feet and costing \$50,000. The work will be done under the general supervision of F. I. Cabell, chief engineer for the railroad company.

#### Organized to Serve Shippers.

Galveston, Tex., August 24.—[Special.]—The Southwestern Industrial Traffic League, composed of railroad traffic men of Texas, Oklahoma, Louisiana and Arkansas, has been organized at a meeting here. Its purpose is to serve the shippers of these four States. The Texas Industrial Traffic League will co-operate with it. The officers of the Southwestern Industrial Traffic League are: U. S. Pawkott, San Antonio, president; H. J. Fernandez, Monroe, La., first vice-president; W. V. Hardie, Oklahoma City, second vice-president; C. D. Mowan, Fort Smith, Ark., third vice-president; F. A. Leffingwell, Houston, secretary and treasurer.

#### Street Railway Extension Necessary.

Plans for an extension of street-railway service to shipyards on the industrial canal at New Orleans are under consideration. Owing to the financial difficulties of the New Orleans Railway & Light Co., it has been suggested that the New Orleans Belt Railroad make the needed track changes and arrange with the street-railway company to operate cars over them. These extensions, it is estimated, would cost about \$200,000, and it is in the plan for the street-railway organization to eventually purchase the extensions at cost from the municipality's Belt Line.

#### Coaling Station at Kansas City.

A contract has been awarded to the Railroad Water & Coal Handling Co. of Chicago by the Chicago Great Western Railroad to erect a coaling station at Kansas City, Mo. It will be a mechanical plant of the balance-bucket type, with concrete pit and foundation and timber superstructure. A pocket of 100 tons capacity, supported on scales, will contain the coal, which will be weighed to the engine tenders. C. G. Delo, chief engineer of the railroad, will supervise the work.

#### Capital Stock Increased \$200,000.

The Rio Grande Valley Traction Co. of El Paso, Tex., has amended its charter to increase the capital stock by \$200,000 from \$300,000 to \$500,000. This is one of the Stone & Webster properties under the El Paso Electric Co. C. W. Kellogg is manager at El Paso.

#### Engineering Appointment.

Leland F. Kimball has been appointed engineer of buildings for the Baltimore & Ohio Railroad's Western lines, with offices at Cincinnati. He has been assistant engineer of the Illinois Central Railroad at Chicago.



## TEXTILE

### \$100,000 Hosiery Knitting Mill.

Hosiery will be knit by the Pee Dee Knitting Mill, Cheraw, S. C., incorporated with \$100,000 capital by Robert Chapman, Edward Malloy and S. T. McManus.

### Textile Notes.

Installations of additional new machinery are planned by the Toccoa (Ga.) Cotton Mills.

An increase of capital to \$25,000 is planned by the Gault Manufacturing Co., Union, S. C.

Additional carding machinery will be installed by the St. Pauls (N. C.) Cotton Mills, and the new equipment has been ordered.

Hosiery production has begun at the Cantigny Mills, St. Pauls, N. C., with an equipment of 24 knitters and accompanying machines.

Wm. Bennett, Seymour Rosedale and A. F. Campbell have incorporated the Calhoun Cotton Mills of Anniston, Ala., with \$100,000 capital.

Report states that the Abingdon Mills, Huntsville, Ala., will build an additional cloth plant. This company has 28,080 ring spindles and 466 looms.

A 90x44½-foot additional building will be erected by the Mount Vernon-Woodberry Mills of Baltimore. Jos. Evans Sperry is the architect, and Gladfelter & Chambers are the contractors.

Five thousand spindles will be added by the Neeronssett Hosiery Mills, Cumberland, N. C., which company has erected a building for and ordered the new machinery.

Organization has been effected by the Elk River Manufacturing Co., Butler, Tenn., recently mentioned as incorporated with \$10,500 capital. A 40 horse-power steam plant with belt drive and \$3000 mill machinery will be operated; J. E. Reece, president; J. H. Vaught, vice-president; B. A. Lipford, secretary-treasurer.

Fifty dozen pairs of men's hose will be the daily capacity of a knitting mill which Charles A. Morrison of Shelby, N. C., will establish. He has a building and has ordered machinery to include 10 knitters with electric power drive.

A building has been secured and machinery has been ordered, including 24 knitters, for the Mebane (N. C.) Hosiery Mills. This company has organized with a capital of \$50,000 and the following officers: President, W. S. Crawford; vice-president, W. Y. Malone; secretary-treasurer, C. E. Correll.

### Big Drainage System Contract.

Contract has been awarded at \$444,034 for constructing the drainage system for Poinsett County Drainage District No. 7, Harrisburg, Ark. It was obtained by the McWilliams Southern Dredging Co. of Chicago, and the work includes the following: 1.97 miles of ditch 25 feet wide at the bottom; 1.33 miles 50 feet wide; 5.30 miles 60 feet wide; 5.47 miles 100 feet wide; total excavation 3,552,275 cubic yards. Pride & Fairley of Blytheville, Ark., are the engineers.

### Mexican Graphite to Bethlehem Plant.

Hermosillo, Mexico, August 24—[Special.]—It is announced by John Brunton and General Arnulfo Gomez, who own a large graphite mine situated at La Colorado, State of Sonora, that they have contracted for the sale and delivery of 3000 tons of graphite to a large graphite-manufacturing plant at Bethlehem, Pa. The price to be paid is \$30 per ton at the mine. The working force at the mine will be largely increased in order to fill the new contract as promptly as possible.

### School Children Contribute \$50,000,000 Through War Gardens.

One million five hundred thousand boys and girls are enrolled in the United States school garden army, cultivating something over 1,200,000 war gardens. The average patch cultivated is a little over one-fifteenth of an acre. The products, which range from parsnips to pigs and from turnips to turkeys, average approximately \$500 an acre and total about \$50,000,000.

## Good Roads and Streets

### Bonds Voted.

Bay City, Tex.—Matagorda county voted \$65,000 bonds for building 5-mile shell road.

Cuero, Tex.—De Witt county voted \$40,000 bonds for road construction.

Sulphur Springs, Tex.—Hopkins county voted \$35,000 bonds for building highways.

Woodville, Miss.—Wilkinson county voted \$60,000 bonds for highway construction.

### Contracts Awarded.

Arendia, Fla.—State awarded contract for building 2½-mile concrete and 2½-mile brick road.

Camp Sheridan, Ala.—Government awarded contract for \$20,000 highway construction.

Fulton, Miss.—Itawamba county awarded contract for 24-mile road excavation.

Kansas City, Mo.—City awarded \$18,580 contract for street paving.

Tuskegee, Ala.—Macon county awarded contract for building 4-mile sand-clay portion of Dixie Overland Highway.

Washington, D. C.—District Commissioners awarded \$25,000 contract for paving in Judiciary Park.

### Contracts to Be Awarded.

Ashdown, Ark.—Little River county opens bids August 30 for building an 11-mile gravel highway.

Bristol, Va.—Tenn.—Cities of Bristol, Tenn., and Bristol, Va., invite bids until September 23 for 31,000 square yards of concrete and asphalt paving.

Camden, Ark.—Ouachita county will build 18-mile gravel road estimated to cost \$75,457.

Clarendon, Ark.—Monroe county opens bids September 6 for constructing an 8-mile concrete and a 14-mile gravel road.

Key West, Fla.—City invites bids until September 18 for 30,000 square yards of asphalt paving, cement treatment.

Lonoke, Ark.—Lonoke county received proposals until September 2 for building 2-mile macadam road.

Newport, Tenn.—Cocke county has \$30,000 appropriation for building 10-mile portion of Dixie Highway.

Pocahontas, Ark.—Randolph county receives proposals until September 2 for constructing 9.4-mile macadam road.

Sheridan, Ark.—Grant county will invite proposals for building a 14½-mile gravel road.

Wheeler, Tex.—Wheeler county invites proposals until September 2 for constructing a 28-mile sand-clay highway.

### Proposed Military Highway for Southwest Texas.

Corpus Christi, Tex., August 21—[Special.]—Within the next 60 days a meeting of the military division of the Colorado-to-the-Gulf Highway Association will be held in Corpus Christi. The date will be selected by the executive committee of the Texas division according to Secretary Edward H. Ailes, who has returned from Hillsboro, where he attended a convention of the association.

Working in co-operation with the Bexar County Highway League, the Corpus Christi Commercial Association is now devoting every energy to securing Federal recognition for the building of a military highway between San Antonio and Corpus Christi, and thence from Corpus Christi to the Rio Grande Valley.

It is believed that if this recognition can be secured that the Capital Issues Committee at Washington will approve the issuance of bonds by the several counties to be traversed for the purpose of building a modern hard-surface road all of the way from San Antonio to Brownsville.

### Highways Meetings to Be Held in Chicago in October.

The American Association of State Highway Officials will hold its annual meeting at the Hotel La Salle, in the city of Chicago, on October 7, 8 and 9.

There is a proposition pending for a joint meeting of the American Association of State Highway Officials and the Highway Industries Association the 10th, 11th and 12th in the same city, announcement for which is expected to be made within the next two weeks.

### For \$13,000,000 Locomotive Works.

Plans of the American Locomotive Co. of New York for increasing its manufacturing facilities include an investment of \$13,000,000 for a branch which is proposed at St. Louis. The management is conferring with the War Industries Board relative to financing this new plant, which is expected to furnish many locomotives to the Government Railroad Administration. A 200 to 300-acre site, the employment of 3000 skilled mechanics and a monthly output of 40 locomotives are under consideration.

## MINING

### To Organize \$1,000,000 Company.

Capitalized at \$1,000,000, the Electric Mining Co. of Wheeling, W. Va., will be organized to develop coal lands in the Buffalo district of Brooke county. R. E. Breed and H. L. Montgomery of New York, H. L. Finley of Brooklyn, N. Y.; George N. Tidd of Elizabeth, N. J., and Frank B. Ball of Plainfield, N. J., have chartered the new corporation.

### To Mine Virginia Coal.

Tazewell county coal will be mined by the Crescent Red Ash Coal Co. of Doran, Va., chartered with a capitalization of \$500,000. This company's officers are: President, C. A. Bray of Greensboro, N. C.; vice-president, R. L. Jenkins of Radford, Va.; secretary-treasurer, N. B. McCaless of Salisbury, N. C.

### \$7,500,000 Graphite Enterprise Chartered.

The International Graphite Corporation of Richmond, Va., has been chartered with a capitalization of \$7,500,000 and the following officers: President, Thomas B. Gay; vice-president, E. A. Saunders; secretary-treasurer, Floridius S. Cosby.

### For Kentucky Coal Developments.

A \$300,000 company will be organized by John McGregor, Albert Mulkey and William C. Hill of Waverly, Ky., for the development of Kentucky coal properties. It has been chartered as the Producers Coal Co.

### Western Farmers to Locate in Mississippi.

Ocean Springs, Miss., August 24—[Special.]—Frank Frush of Cody, Neb., and Sioux City, Iowa, is the leader in a movement to bring a number of Iowa and Nebraska farmers to South Mississippi for farming operation on a considerable scale. Two thousand acres, located about two and one-half miles from Ocean Springs, have been secured, and back of the proposed development is a \$50,000 corporation, the Suburban Acres Co. of Sioux City, Iowa, of which G. C. Robinson, cashier of the Bankers' Loan & Trust Co., is treasurer. Only farmers who have worked with Mr. Frush in the West will be asked to join in the enterprise, and arrangements will be made looking to the ultimate purchase of the land by farmers that are employed in the development. Livestock will be raised on a large scale, and tractors will be used as motive power for farm implements. The first development will be on a 200-acre tract; to be followed by other 200-acre tracts as rapidly as feasible.

### The Cotton Movement.

In his report of August 23, Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 23 days of the season was 223,917 bales, a decrease under the same period of last year of 80,472 bales. The exports were 234,971 bales, a decrease of 27,396 bales. The takings were, by Northern spinners, 74,412, a decrease of 30,312 bales; by Southern spinners, 187,063, an increase of 6450 bales.

### Blotting-Paper Machinery Wanted.

P. P. DIEZ HERMANON, Jerez de la Frontera, Spain.—We are interested in receiving catalogs of machinery for the manufacture of blotting paper.

### From a French Soldier.

BARLES, Rank du 4 Zouaves, Company G. O. G. P., 23 Rue du Temple, care Charge d' Affaires, Paris, France.—I am under care in the military hospital, yet I will welcome propositions from manufacturers who wish to push their products in the French Markets by agents and representatives.

### To Represent American Manufacturers.

M. MARECHAL, Kinsbergenstraat 123, The Hague, Holland.—We received your MANUFACTURERS RECORD and thank you. Before the war the Dutch and Belgian markets were in hands of the Germans for miscellaneous articles, and it is now the right time for American industry to take dispositions in order to be able to get a good place in these countries (15,000,000 inhabitants), which import in ordinary time a considerably big quantity of all sorts of goods: Machineries; woollens; cotton; silk stuffs; velvet; socks; hats; millinery; strings; leather, etc. We are disposed to take American interests as representatives, and the Belgian Consul at New York has references upon us.

# Construction Department

## EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

## DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

## AIRPLANE PLANTS, STATIONS, ETC.

D. C., Anacostia.—Aviation Field.—War Department, Washington, has \$103,850 appropriation for improvement and enlargement of Bolling Field, Anacostia, on left bank of Eastern Branch of Potomac River; will erect additional hangar and quarters for 23 officers and 154 men, aero repair shop, machine shop, balloon station and photo developing hut for developing and printing of aerial photographs taken in vicinity; balloon station equipment will include captive balloons and free balloons for training elsewhere.

Va., Lee Hall.—Balloon School.—War Department, Washington, has \$205,000 appropriation for building balloon school; plans call for 60 buildings to include balloon shed, aero repair shop, garage, firehouse, photo laboratory, mess halls, barracks and school; accommodate 1000 men; Major Harry R. Vaughan, A. S. M. A., to be in charge; school is for maintenance of officer observers in control of artillery fire from observation balloons.

## BRIDGES, CULVERTS, VIADUCTS

Ala., Montgomery.—Montgomery County Commrs., Thos. H. Edwards, Engr., Montgomery, will construct reinforced concrete 120x20-ft. bridge, by county force; cost \$50,000.

La., New Orleans.—Port Commrs., John R. Loomis, Purchasing officer, 833 Canal St., ask bids until Sept. 6 (change of date) for furnishing and erecting, on foundations furnished, 4 double-track railway and highway Strauss trunnion bascule bridges at railway crossings, Inner Harbor Navigation Canal; specifications, etc., at offices of Commrs. and of Geo. W. Goethals & Co., Engrs., 40 Wall St., New York. (See Machinery Wanted—Bridges.)

## CANNING AND PACKING PLANTS

N. C., Wilmington.—Carolina Packing Co. plans to increase capital \$50,000 and enlarge plant.

Tex., Houston.—Kirby Kanner Company, capital \$5000, inceptd. by G. E. Davidson, E. D. Blosson and R. F. Ford.

## CLAYWORKING PLANTS

Ky., Murray.—Clay.—Calloway County Clay Co., capital \$2500, inceptd. by W. H. Finney, W. S. Swann and T. H. Stokes.

## COAL MINES AND COKE OVENS

Ala., Birmingham.—Sandstone Coal Mining Co., W. M. Holt, Pres., leased Big Four Mines, near North Birmingham, and will develop; increase present daily capacity of 15 tons.

Ala., Delmar.—Glen Mary Coal Co., Natural Bridge, Ala., purchased 440 acres of coal land and will continue development.

Ky., Artemus.—Wheeler-Jellico Coal Co., capital \$50,000, inceptd. by R. L. Wheeler, R. R. Wheeler and R. C. Partin.

Ky., Brooksville.—Citizens' Coal Co., capital \$500, inceptd. by E. E. Corlis, J. W. Byrne and J. E. Poage.

Ky., Greenville.—W. H. Duncan Coal Co. increased capital from \$50,000 to \$550,000.

Ky., Greenville.—O. C. Evans will install equipment for shaft mine; electric power. (See Machinery Wanted—Mining Machinery.)

Ky., Harrodsburg.—Raymond Coal Co., capital \$10,000, inceptd. by O. P. Raymond, Thos. Raymond and Harry J. Hood.

Ky., Jackson.—Kentucky Fuel Co., capital \$50,000, inceptd.; Ryland C. Musick, Pres.;

H. D. Huffman, Secy.; develop coal land in Breathitt, Kentucky County.

Ky., London.—Goose Creek Coal Co., capital \$50,000, inceptd. by G. N. Pitman, Chris. Zimmerman and C. W. Brown.

Ky., Louisville.—Mountain Gem Coal Mining Co. increased capital from \$10,000 to \$20,000.

Ky., Owensboro.—Kirk Coal Co. increased capital from \$10,000 to \$100,000.

Ky., Pikeville.—Keel Coal Co. increased capital from \$15,000 to \$45,000.

Va., Doran.—Crescent Red Ash Coal Co. chartered; capital \$500,000; C. A. Bray, Pres., Greensboro, N. C.; R. L. Jenkins, V. P., Radford, Va.; N. B. McCanless, Secy.—Treas.

W. Va., Charleston.—Kanawha Collieries Co., capital \$100,000, inceptd. by Harold P. Tompkins, Edward Gebhart, C. B. Johnson and others.

W. Va., Morgantown.—Dunkard Coal Co., capital \$25,000, inceptd. by John L. Blacker, W. J. McDonald, Edwin E. Chalfant and others.

W. Va., Wheeling.—Electric Mining Co., capital \$1,000,000, inceptd. by K. E. Bred and H. L. Montgomery of New York, Geo. N. Tidd of Elizabeth, N. J., Frank B. Ball of Plainfield, N. J., and others; mine coal in Buffalo Dist. of Brooke County.

## COTTON COMPRESSES AND GINS

Ala., Guntersville.—Guntersville Gin Co., capital \$10,000, inceptd. by R. R. Cleskey and J. R. Cleskey of Gadsden and S. K. Yarbrough of Boaz, Ala.

Ala., Samson.—Douglas Cotton Oil Co., A. S. Douglas, Pres., purchased Samson Cotton Oil, Gin & Fertilizer Co.; contemplates improvements. (See Cotton-seed Oil Mills.)

La., Pearl River.—A. D. Crawford will erect cotton gin.

Mo., Poplar Bluff.—Bluff City Cotton Gin Co., capital \$5000, organized.

Okla., Clayton.—Clayton Gin Co., capital \$5000, inceptd. by Jake Easton, Clark Wasson and C. E. Dudley, all of Antlers, Okla.

S. C., Nesmith.—Talleast-Cooper Co. organized; J. B. Talleast, Pres.; J. M. Rodgers, V. P.; G. B. Cooper, Secy.—Mgr.; has building; cotton gin, etc.; 25 bales daily. (Lately noted chartered, \$6000 capital.)

Tex., Elmore.—J. D. Long will rebuild cotton gin reported burned at loss of \$10,000.

Tex., Houston.—Anderson, Clayton & Co. will erect following fireproof structures: Boiler-house 50x50 ft.; compress building 50x150 ft.; 2-story warehouse 150x525 ft.; total cost \$230,000; R. J. Cummins, Archt. and Construction Engr., Stewart Bldg., Houston; Horton & Horton, General Contrs., McKinney and Velasco Sts., Houston. (Lately noted under Cotton Compresses and Gins.)

## COTTONSEED-OIL MILLS

Ala., Birmingham.—Magic City Cotton Oil Co., 40th St. and 12th Ave., North, will rebuild plant reported burned at loss of \$100,000.

Ala., Samson.—Douglas Cotton Oil Co. organized; A. S. Douglas, Pres., and R. B. Douglas, Secy.—Treas.; purchased Samson Cotton Oil, Gin & Fertilizer Co.; contemplates improvements.

## DRAINAGE SYSTEMS

Ark., Harrisburg.—Poinsett County, Drainage Dist. No. 7, C. K. French, Secy., let contract to McWilliams Southern Dredging Co., Chicago, at \$44,034.38, to construct following: 1.97 mi. ditch, 25-ft. bottom width; 1.33 mi. 50-ft. bottom; 5.30 mi. 60-ft. bottom, and 5.47 mi. 100-ft. bottom width; total excavation 3,552,275 cu. yds., also clearing right of way; Pride & Fairley, Engrs., Rhytheville, Ark. (Bids lately noted under Blytheville.)

Ky., Calhoun.—McLean County Drainage Commrs. will let contract Sept. 5 to construct ditch and arms or laterals (W. A. Thomas and others interested in petition for drainage district; pending in County Court); 209,448.9 cu. yds. earth removal. (See Machinery Wanted—Drainage.)

Ky., Morganfield.—Goose Pond Ditch surveys are being completed; 11 mi.; floating dredge work; Norman R. Orcutt, Chief Engr., Morganfield.

Mo., Poplar Bluff.—Inter-River Drainage Dist., A. H. Frederick, Secy., let contract to W. E. Callahan Construction Co., 1514 City National Bank Bldg., Omaha, Neb., to construct 39 mi. of levees along Black and St. Francis Rivers; 2,247,670 cu. yds. drag line work; Morgan Engineering Co., Engr., Goodwyn Institute Bldg., Memphis, Tenn. (Noted in July as inviting bids.)

S. C., Foreston.—Clarendon County Drainage Dist. No. 3, Greeleyville, S. C., Courtney Campbell, Secy., asks bids for Sept. 14, at office Mallard Lumber Co., Greeleyville, to construct Foreston and Greeleyville canals; 15 mi. canal, 175,000 yds. excavation. Previously noted. (See Machinery Wanted—Drainage.)

## ELECTRIC PLANTS

D. C., Washington.—Potomac Electric Power Co., W. F. Ham, V. P., 14th and C Sts. N. W., issued \$2,100,000 bonds; install 15,000 K. W. turbo generator; make various other improvements and extensions; L. E. Sinclair, General Supt. (Lately noted planning to issue.)

Fla., Pensacola.—Government will construct electric-lighting system in connection with townsite development south of Bayou Grande; Arthur Pew, Engr., Pensacola. (See Road and Street Work.)

Ga., Marshallville.—Big Indian Power Co., capital \$50,000, inceptd. by H. A. Murph, J. J. Murph and F. M. Mullins.

Md., Baltimore.—Consolidated Gas Electric Light & Power Co., Lexington Street Bldg., may expend \$3,542,000 to build additions at Westport electric generating station in connection with proposed \$200,000,000 appropriation by War Trade Board for Government construction or improvement of electric-power plants in war industrial centers; ordered 2 units to develop 55,000 additional horse-power at Westport steam-power electric generating station, where 2 units for 55,000 H. P. are being installed.

Mo., Novinger.—Merchants Light & Power Co., lately noted to rebuild burned plant, will install 75 H. P. Corliss engine. (See Machinery Wanted—Engine.)

Mo., Springfield.—Springfield Gas & Electric Co. is having plans prepared by Sander-son & Porter, Engrs., 52 William St., New York, for power plant; purchased and will install 10,000 H. P. steam turbine and other equipment. (Lately noted.)

N. C., Tarboro.—City, J. H. Jacobs, City Clerk, will issue \$50,000 bonds for electric-light and power-plant improvements.

Okla., Duncan.—City, J. B. McLendon, Mayor, contemplates construction to develop 330 H. P.; cost \$30,000; vote on bonds Sept. 2; Benham Engineering Co., Consit. Engr., Colcord Bldg., Oklahoma City. (Lately noted.)

Okla., Shawnee.—Seminole Public Service Co., capital \$100,000, inceptd. by Geo. A. Henshaw and A. Carey Hough of Oklahoma City, and W. A. Racher of Chicago.

S. C., Charleston.—Charleston Electric Service Co., capital \$20,000, inceptd. by L. A. Edwards and Augustine T. Smythe.

## FERTILIZER FACTORIES

Ala., Samson.—Douglas Cotton Oil Co., A. S. Douglas, Pres., purchased Samson Cotton Oil, Gin & Fertilizer Co.; contemplates improvements. (See Cotton-seed Oil Mills.)

Fla., Jacksonville.—American Agricultural & Chemical Co., Heard Bldg., let contract Turner Construction Co., 244 Madison Ave., New York, to erect plant; 2 stories; 480x250 ft.; reinforced concrete; cost \$300,000; to replace burned plant; A. H. Nickerson, Engr., offices at Engineering Dept., 92 State St., Boston, Mass. (Lately noted.)

N. C., Hilton.—N. B. Josey Guano Co. will rebuild fertilizer plant reported burned at loss of \$100,000.

## FLOUR, FEED AND MEAL MILLS

Fla., Gretna.—Florida Yellow Pine Co. will install flour mill.

Ky., Faywood.—Faywood Milling Co. increased capital from \$3000 to \$15,000.

Ky., Louisville.—Gold Proof Milling Co. increased capital from \$50,000 to \$150,000.

Ky., Louisville.—Wathen Milling Co., 104 W. Main St., organized; R. E. Wathen, Pres.; J. B. Wathen, Jr., V. P.; O. H. Wathen, Secy.; W. F. Knebelkamp, Mgr.; erect fireproof building, cost \$200,000; materials and machinery purchased. (Lately noted inceptd., \$100,000 capital.)

Mo., Knobnoster.—Ame Milling Co. will rebuild plant reported burned at loss of \$50,000.

N. C., Gastonia.—Upchurch Milling Co. inceptd. with \$100,000 capital by T. P. Upchurch, J. C. Thomas and J. W. Moore.

N. C., Laurinburg.—The Hammond Co., Ray Hammond, Secy., will erect 40x80-ft., 5-story and 40x100-ft., 2-story mill-construction building; will ask bids; purchased machinery; daily capacity 300 bbls. flour and by-products. (Previously noted to rebuild burned mill.)

S. C., Livingston.—Livingston Milling Co. increased capital from \$3000 to \$3000.

S. C., St. Matthews.—St. Matthews Roller Flour Mill, capital \$5000, inceptd. by C. F. Zeigler, J. T. Grissette and J. C. Hilt.

Tenn., Chattanooga.—Winer Feed Co., 1132 Market St., organized; Harry Winer, Pres.—Mgr.; H. A. Winer, V. P.; A. Winer, Secy.; leased building; feed jobbing; later contemplates manufacture. (Recently noted inceptd., \$10,000 capital.)

## FOUNDRY AND MACHINE PLANTS

Ala., Birmingham.—Steel Ship Plates, etc.—Birmingham Steel Corp., G. S. Bergen-tahl, Chief Engr., determined all details for construction of plant; prepared site; awarded contracts for erecting buildings and furnishing machinery; mechanical equipment will include shears, punches, benders, power plant, etc., to manufacture steel for building steamships; monthly capacity 4000 tons fabricated steel shapes; initial cost of plant \$1,000,000 with plan for future increase to between \$15,000,000 and \$20,000,000; initial installation to employ 2000 men; future installation 20,000 men. (Lately noted chartered with \$1,000,000 capital, Henry L. Brittain, Pres., New York, to manufacture steel shapes for Government vessels being built on Atlantic and Gulf coasts, etc.)

La., New Orleans.—Machinery, etc.—Stern Foundry & Machinery Co. will erect addition costing \$16,000; R. W. Markel, Contr., New Orleans.

Md., Baltimore.—Blacksmith Shop.—Fred. Stehr, Erdman Ave. near Belair Road, will rebuild blacksmith shop and stable reported burned.

Md., Curtis Bay.—Ship Plates.—Baltimore Car & Foundry Co., Baltimore, subsidiary of Standard Steel Car Co., Pittsburgh, will establish plant fabricating steel plates for Government ships; invest \$1,000,000 for machinery; use present buildings, including 1600x180-ft. main shop; erect several small structures, 500 dwellings for employes, hotel, etc.; has let contracts.

Mo., St. Louis.—Locomotives.—American Locomotive Co., 30 Church St., New York, plans to build \$13,000,000 locomotive works; 200 to 300-acre site; weekly capacity 40 locomotives; employ 3000 skilled mechanics; conferring with War Industries Board relative to financing this branch plant.

Mo., St. Louis.—Cars.—American Car & Foundry Co., Syndicate Trust Bldg., let contract Dickie Construction Co., Syndicate Trust Bldg., St. Louis, to erect machine and pattern shop; 1½ stories; 95x241 ft.; reinforced concrete, steel and brick; reinforced concrete flooring; concrete foundation; cost \$250,000; plans by Brussel & Viterbo, Wright Bldg., St. Louis. (Lately noted.)

Mo., St. Louis.—Pulleys.—Medart Patent Pulley Co., 3500 De Kalb St., let contract J. H. Wise Construction Co., 611 Post Dispatch Bldg., St. Louis, at \$50,000 to erect plant; 48x100 ft.; reinforced concrete and brick; reinforced concrete flooring; concrete foundation.

S. C., Waterloo.—Cotton Chopper.—Byon Nichols and others contemplate manufacture

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



of cotton chopper. (See Machinery Wanted—Cotton Chopper.)

Tex., Houston—Machine Shop—Lucy Mfg. Corp., of Texas will rebuild machine shop at 14th Carr St. reported burned at loss of \$150,000.

Va., Norfolk—Iron Works—Atlantic Iron Works let contract to R. R. Richardson & Co., Norfolk, to erect plant; 2 stories; 122x52 ft.; plans by Benj. F. Mitchell, Seaboard Bank Bldg., Norfolk.

### GAS AND OIL ENTERPRISES

Ala., Drummright—Oil pipe line.—War Pipe Line Co. will build oil pipe line; Sinclair Oil & Refining Corp., 129 Broadway, New York, further advises Manufacturers Record: War Pipe Line Co. will build 200 mi. 8 and 6 in. pipe line parallel to portion of Drummright (Okla.) to East Chicago (Ill.) pipe line of Sinclair Cudahy Pipe Line Co.; pipe contract let to Booth & Elin, Pittsburgh, Pa.; construction supervised by Sinclair Cudahy Pipe Line Co., John R. Manton, Sinclair Bldg., Engr.; latter company will erect the buildings; machinery orders placed; on inquiries as to fittings, etc., address J. C. Hunt, Conway Bldg., Chicago. (Recently noted that War Pipe Line Co., controlled by Sinclair Oil & Refining Corp., and fostered by Government, will build line from Drummright to Freeman, Mo.; rights of way secured; piping ordered; daily capacity 2000 bbls. oil; total cost \$2,500,000.)

Ark., Little Rock—Allied Oil Co., capital \$800,000, incptd.; Geo. A. Knox, Pres.; Walter L. Brown, V.P.; R. W. Porter, Secy.-Treas.

Ky., Caney—Oil Refinery.—Cromer Oil, Gas, Drilling & Refining Co., capital \$75,000, incptd. by John H. Ralshack, Enoch Cromer and Elisha Brown.

Ky., Heidelberg—M. O. & H. Coal Co., incptd. by A. L. McDuffy, Stanley Caldwell and Patrick Henry.

Ky., Lexington—Blackburn Oil & Gas Co., capital \$25,000, incptd. by E. B. Blackburn, W. R. Bowman, J. E. Bassett and Chas. Land.

Ky., Mayesville—Cabin Creek Oil & Gas Co., capital \$25,000, incptd. by G. W. Gindler, F. H. Perry and A. D. Cole.

Ky., Winchester—Pipe Line.—Cumberland Pipe Line Co. will construct 2 in. oil pipe line from Ross Creek section of Lee and Estill counties into Jackson County; 7 mi.; provide additional daily production of 200 bbls.

Mo., Joplin—Filling Station.—Joplin Oil Co. will erect 1-story filling station 42x28 ft. Okla., Carney—Gas Plant.—City voted \$1500 bonds for gas plant. Address The Mayor.

Okla., Chickasha—Grotton Natural Gas Co., capital \$250,000, incptd. by T. H. Williams and Geo. E. Montgomery of Chickasha, and C. C. Steinberger of Oklahoma City.

Okla., Chickasha—Champion Garber Oil & Gas Co., capital \$25,000, incptd. by G. C. Calvert and John E. White of Chickasha, and Geo. H. Thomas of Norge, Okla.

Okla., Okmulgee—Adrienne Oil & Gas Co., capital \$150,000, incptd. by John K. Rebold and Albert Shelton of Okmulgee, and Wm. M. Murphy of St. Louis, Mo.

Okla., Tulsa—Citizens State Oil & Gas Co., capital \$100,000, incptd. by Merritt J. Glass, F. C. Moore and Jas. Bowen.

Okla., Tulsa—Early Bird Oil Co., capital \$100,000, incptd. by J. W. McMillan, F. E. Horney and J. B. White.

Tex., Wichita Falls—Oil Refinery.—J. A. Fisher and others will build oil refinery; daily capacity 1000 bbls.

Va., Bush Bluff—Oil pipe line.—Bureau Yards and Docks, Washington, opened bids to construct fuel oil pipe line at Army Quartermaster Terminal; Baker-Dunbar-Alten Co., Stock Exchange Bldg., Philadelphia, submitted bid at \$27,490. (Lately noted.)

### HYDRO-ELECTRIC PLANTS

W. Va., Cheat Haven—West Penn Power Co., 221 Fourth Ave., Pittsburgh, Pa., will build \$5,000,000 hydro-electric plant to relieve partially serious electric power shortage in Pittsburgh district; locate probably at corporation's coal mine near Freeport, Pa.; extend transmission system into West Virginia, connecting there with previous water-power developments; Government finances \$2,000,000 of cost; 3 years after war ends redemption of plants will be determined by Government appraisers enabling West Penn corporation to acquire full ownership. (Portion of \$20,000,000 expenditure proposed by War Trade Board for Government construction in improvement of power plants in war industrial centers.)

### ICE AND COLD-STORAGE PLANTS

Fla., Jacksonville.—City Commrs. contemplate ordering election to vote on construction of ice plant.

Fla., Miami.—Southern Utilities Co. will erect addition to ice plant; cost \$10,000.

Ga., Forsyth.—City contemplates building ice plant. Address The Mayor.

Ga., Jackson.—W. E. Merck, Supt. water and light plant, contemplates installing ice plant.

Ky., Stithton.—War Department, Washington, will install refrigerating plant and build waterworks in connection with construction of cantonment; John Griffith & Son of Chicago have large portion of general contract involving \$15,000,000.

Mo., Kansas City.—American Butter Co., J. S. Carpenter, Pres., 540 Walnut St., will install 25-ton ice machine. See Miscellaneous Factories. (See Machinery Wanted—Ice Machinery.)

S. C., Camp Sevier.—Laundry.—War Dept., Washington, will build laundry and powerhouse at Camp Sevier, near Greenville; laundry building will be 250x160 ft.; total estimated cost \$150,000 to \$200,000; construction under supervision of Camp Quartermaster.

Tex., Port Neches.—Port Neches Ice Co., capital \$25,000, incptd. by John Ward, Jr., R. C. McFarlane and Eva May Ward.

Tex., Waco.—Geyser Ice Co., G. H. Luedde, Mgr., has plans for ice storage-house; brick, concrete, cork and reinforced steel; 100x62 ft.; height 50 ft.; capacity 6000 tons; cost \$80,000 to \$100,000. (Lately noted.)

Va., Rocky Mount.—Farmers Mercantile Co. will install ice and cold-storage plant.

### IRON AND STEEL PLANTS

Ala., Birmingham—Rolling Mill.—Gerson Iron & Metal Co. purchased East Birmingham Rolling Mills; increase daily capacity from 30 to 50 tons; manufacture bar iron for Government; employ 50 men.

Md., Sparrows Point—Steel Plant.—Bethlehem Steel Co. will erect 2 additional steel plant buildings; each 3 stories and 1150x272 ft.; brick and concrete construction; let contract to Deverell-Spencer Co., 514 Garrett Bldg., Baltimore. (Portion of additions connected with \$30,000,000 expenditure lately detailed. Government financing \$20,000,000 of the amount.)

W. Va., New Cumberland—Steel Plant.—Hayward Steel Co. will organize; offices in Farmers Bank Bldg., Pittsburgh, Pa.; preparing plans and specifications for steel plant. (Lately noted chartered with \$250,000 capital.)

### LAND DEVELOPMENTS

Fla., Tampa.—City will improve De Soto Park; cost \$5000; D. B. McKay, Chmn. Commrs. of Public Works.

Va., Norfolk.—Wilcox Land Improvement Co. chartered; capital \$10,000; F. Nelson Wilcox, Pres.; Bernard J. Utz, Secy.

Va., Richmond.—Liberty Place Corp., capital \$25,000, chartered; Ernest M. Garrett, Pres.; Frank S. Richeson, Secy.-Treas.

### LUMBER MANUFACTURING

Ala., Carrollton.—A. E. Bell will rebuild planing mill reported burned at loss of \$50,000.

Ala., Lomax.—Vida Lumber Co. will repair plant reported damaged by fire at loss of \$5000.

Ala., Monroeville.—Hutton Dye Lumber Co. increased capital from \$6000 to \$80,000.

Ark., Watson.—Watson Lumber Co. organized; E. O. Johnson, Pres. Mgr.; A. Kimball, V.P.; Geo. W. Reese, Secy.; all of Arkansas City; manufacture oak, ash, cypress and gum lumber; daily capacity 20,000 ft. (Lately noted incptd., \$20,000 capital.)

Fla., Pinewood.—Mayo Lumber Co. of Milltown, Fla., purchased plant property of Bay Point Mill Co.; contemplates improvements.

Fla., St. Cloud.—A. C. Starbird of Apopka, Fla., secured timber privileges on 7000 acres in Osceola County; extend railroad 10 mi. and carry timber into Apopka, where it will be cut, dressed and shipped.

La., Couchwood.—Weaver Bros. & Looney will rebuild lumber mill reported burned.

La., Lake Charles.—Hodge Fence & Lumber Co. lately noted to rebuild plant destroyed by hurricane, will repair mill and planer building at cost of \$10,000; has machinery.

La., Morehead Parish.—Crittenden Lumber Co. of Earle, Ark., and Providence, R. I., will build band hardwood mill; develop 11,000 acres hardwood timber land in Morehead Parish. (Lately noted to have purchased timber property.)

Miss., Water Valley.—J. H. Gore will rebuild lumber plant reported burned at loss of about \$60,000.

N. C., Salisbury.—Graf-Davis-Collett Lumber Co. will erect addition; brick; 175x90 ft.

Tenn., Jackson.—Henry A. Lesh Lumber Co. increased capital from \$7500 to \$24,000.

Tenn., Knoxville.—Logan-Maphot Lumber Co., capital \$10,000, incptd. by J. M. Logan, Ed. Maphot, H. S. Wisner and others.

Tex., Elkhart.—Peter Bridges will rebuild sawmill burned at loss of \$7000.

### METAL-WORKING PLANTS

Ark., Fort Smith—Scissors, etc.—Solid Steel Scissors Co., Hugh J. Miller, Secy.-Mgr., will build 100x50-ft. 2-story ordinary construction building; date of opening bids not set; install machinery to manufacture scissors and other cutlery. (Lately noted to build addition and increase daily capacity from 200 to 250 scissors.)

La., Lake Charles.—Fence.—Channel Fence Co., E. W. Channel, owner, lately noted (under Lumber Manufacturing) as to rebuild plant destroyed by hurricane, will rebuild fence warehouse and re-roof factory building; has rebuilt boiler-house and smokestack; will not reconstruct picket warehouse at present; manufactures woven wire and wood picket fencing.

Mo., Kansas City.—Gunsmiths, etc.—Talbot Reed & Mfg. Co., Lydia Ave. and 13th St., will double factory for gunsmiths and binoculars; has plans and specifications for 4-story, 130x112 ft. building, costing \$250,000; let contract to Hoffman Brothers, Kansas City.

N. C., Stony Point.—Coupler.—P. F. Somers contemplates production of patented check line metal coupler. (See Machinery Wanted—Metal Couplers.)

### MINING

Ark., Zinc.—Zinc.—United Zinc Corp., capital \$60,000, chartered by Frank Harris and others.

Ky., Marlon.—Giant Mineral Co., capital \$50,000, incptd. by J. E. Morton, J. B. Riley and C. S. Dunn.

Okla., Commerce.—Mammoth Mining & Royalty Co., capital \$25,000, incptd. by O. C. Womhaner and J. L. Hawthorne of Commerce, and A. S. Maloney of Miami, Okla.

Va., Richmond.—Graphite.—International Graphite Corp. chartered; capital \$7,500,000; Thos. B. Gay, Pres.; E. A. Saunders, V.P.; Floridius S. Cosby, Secy.-Treas.

### MISCELLANEOUS CONSTRUCTION

Ark., Van Buren—Levee.—Crawford Levee Dist., W. G. Furry, Secy., asks bids until Aug. 30 to construct loop to levee; 47,000 cu. yds. embankment; Winters & Dove, Engrs., Fort Smith, Ark. (See Machinery Wanted—Levee.)

Fla., Tampa—Seawall.—City will construct seawall from Bay St. to Verne St.; cost \$5000; D. B. McKay, Chmn. Commrs. of Public Works.

La., New Orleans—Industrial Canal.—Port Commrs., John R. Loomis, Purchasing Officer, 833 Canal St., asks bids until Sept. 6 (change of date) to furnish and erect, on foundations furnished, lock gates and parts for ship lock under construction at entrance to Inner Harbor; Industrial Canal noted in May as follows: Port Commrs. will build industrial canal; J. Devereux O'Reilly, Chief Engr., 200 New Orleans Court Bldg., advises Manufacturers Record: Construction of lock and canal by board's own force; canal 5½ mi. long, with width of 150 ft. at bottom and 250 ft. at top; 25 ft. deep at mean low water; actual work begun May 5; probably complete by Dec. 31, 1939; estimated ultimate cost, \$12,000,000; George W. Goethals & Co., 40 Wall St., Const. Engrs., New York, to design lock and canal. (See Machinery Wanted—Lock Gates and Parts.)

Md., Baltimore—Docks, Piers, etc.—Arundel Sand & Gravel Co., Frank A. Furst, Pres., and Furst Realty Co., Chas. H. Knapp, Pres., plan future development of Arundel waterfront holdings for construction of piers, docks, warehouses, etc.; contemplate \$10,000,000 corporation; J. E. Greiner & Co., Engrs., Baltimore.

Tex., Dallas—Swimming Pools.—City will construct 2 swimming pools; one at Fair Park, costing \$25,000, for use of soldiers at Camp Dick; other in business section; Hans Holland, City Engr., will prepare plans and invite bids for Fair Park pool.

Va., Chincoteague—Retaining Wall.—Bureau of Lighthouses, Baltimore, Md., let contract to E. T. Mears, Chincoteague, to construct cross-coast pile concrete retaining wall.

### MISCELLANEOUS ENTERPRISES

Ala., Camp McClellan—Laundry.—War Department, Washington, will build laundry at Camp McClellan, near Anniston; appropriation \$175,000; Capt. Robt. E. Scott, Construction Quartermaster.

Ala., Camp Sheridan—Laundry.—War Department, Washington, will build laundry at Camp Sheridan, near Montgomery.

Ark., Berryville.—Hardware.—Carroll County Hardware Co., capital \$30,000, incptd. by Connelly Harrington and others.

Ark., Camp Pike—Laundry.—War Department, Washington, will build laundry for 60,000 soldiers at Camp Pike, near Little Rock; cost \$173,000.

D. C., Washington—Printing Plant.—Government is having plans prepared for addition to Printing Building; cost \$500; Jas. A. Wetmore, Supervising Archt., Treasury Department.

Fla., Jacksonville—Laundry.—War Department, Washington, will erect laundry and power plant at Fort Joseph E. Johnston, near Jacksonville, to cost \$150,000; let construction contract to J. V. Wilson Construction Co. of Jacksonville; erection under supervision of Capt. A. D. Allen, Constr. Quartermaster.

Ga., Camp Hancock—Laundry.—War Department, Washington, will build laundry at Camp Hancock, near Augusta.

Ga., Camp Gordon—Laundry.—War Department, Washington, will build laundry and power plant at Camp Gordon, near Atlanta; cost \$180,000.

Ky., Camp Zachary Taylor—Laundry.—War Department, Washington, D. C., will build laundry at Camp Zachary Taylor, near Louisville; cost \$150,000.

Ky., Louisville—Printing.—Slater & Business Printing Co., capital \$10,000, incptd. by Leonard Slater, Matthew Everhart and others; consolidates Slater Printing Co. and Business Printing Co.

Ky., Newport—Greasehouse.—Newport Rolling Mills Co. has plans for greasehouse; 30x20 ft.; 1 story; cost \$10,000; let building contract to D. Meinken of Cincinnati, Ohio.

La., Camp Beauregard—Laundry.—War Department, Washington, will build laundry at Camp Beauregard, near Alexandria.

Md., Eastport—Laundry.—Home Laundry Co. will rebuild laundry reported burned at loss of \$30,000 to \$40,000.

Miss., Camp Shelby—Laundry.—War Department, Washington, will build laundry at Camp Shelby, near Hattiesburg.

N. C., Camp Greene—Laundry.—War Department, Washington, will build laundry and power plant at Camp Greene, near Charlotte, to cost \$175,000; let construction contract to J. A. Jones of Charlotte.

Okla., Heavener—Grain Elevator.—Heavener Grain Co., capital \$10,000, incptd. by J. M. Young, John W. Patton and W. J. Plummer.

S. C., Camp Jackson—Laundry.—War Department, Washington, will erect laundry and power plant at Camp Jackson, near Columbia; cost \$150,000.

S. C., Columbia—Hardware.—Cardinal Wholesale Hardware Co., capital \$50,000, incptd. by Wm. M. Gibbs, Jr., Pres.; L. S. Covin, V.P.; O. P. Loyall, Secy.; L. E. Mauldin, Treas.; E. G. Jones, V.P. and Gen. Mgr.

S. C., Columbia—Automobile Line.—Columbia Automobile Transportation Co., capital \$10,000, incptd.; Clifford Carpinas, Pres.; Ashley P. Walker, Secy.-Treas.

S. C., Rock Hill—Laundry.—A. Law Bldg. of Greenwood, S. C., will establish laundry building and equipment.

Tenn., Hadley Bend—Publishing.—Hadley Bend Publishing Co., capital \$50,000, incptd. by J. L. Akers, E. J. Beckton, R. V. Bright and others; daily newspaper.

Tex., Brownsville—Grain Elevator.—Champion Grain Co., capital \$10,000, incptd. by Louis Champion, J. A. Champion and M. Fernandez.

Tex., Camp MacArthur—Laundry.—War Department, Washington, will build laundry at Camp MacArthur, near Waco.

Va., Norfolk—Beehive Plant.—David C. Lorraine Hotel, Norfolk, has plans for Beehive building and garage; 75x110 ft.; cost \$60,000.

Va., Pochontas.—Abattoir.—Bowman Bros. will rebuild abattoir reported burned at loss of \$8000 to \$10,000.

Va., Yorktown—Mine-filling Plant.—Bureau Yards and Docks, Washington, D. C., has plans for mine-filling plant.

W. Va., Huntington—Dairy.—Huntington Dairy Products Co., capital \$5000, incptd. by John P. Brown, H. W. Sayne and others.

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## MISCELLANEOUS FACTORIES

**Ala.** Birmingham—Fuel-saving Device.—**Mr. Priestley, Wiley A. Hudson, John P. Russell and others** organized company with \$50,000 capital to manufacture fuel-saving device for starting fires in locomotive and stationary boiler grates.

**Ark.** Blaine—Alcohol.—**Jos. A. Schofield, Warren, Pa.** proposes to build plant manufacturing alcohol; advises Manufacturers Record: Endeavoring to have Government finance project; no details decided. (Late-ly reported planning wood-alcohol factory; Government previously noted planning \$2,000,000 alcohol plant.)

**Ark.** Texarkana — Alcohol, etc. — **Dorsey Lumber Co.** may install equipment to distill alcohol, etc., from hardwood. (See Machinery Wanted—Alcohol Machinery.)

**Fla.** Fort Myers—Fish Products.—**Ocean Leather Co., 82 Beaver St., New York.** will build plant for fish curing, drying, etc.; erect building 50x100 ft.; 10-ft. loading stage adjacent to railroad and 12-ft. platform on river side.

**Fla.** Greenwood — Peanuts. — **Greenwood Peanut Co.,** lately noted inceptd., \$50,000 capital, organized with **Jos. Messina** (owner) **Ray City Packing Co., Apalachicola, Fla.** **Pres. Mgr.: R. A. Willis, V.P.: L. B. Smith, Secy.** both of Greenwood; erect, by local labor, storage warehouse with 12,000 ft. floor space, also oil mill and boiler room; purchased machinery for peanut oil and other products. (See Machinery Wanted—Tanks; Flower System, etc.)

**Fla.** Pablo Beach—Twines, etc.—**Palm Utilities Co.,** capital \$50,000, inceptd., to manufacture twines, matings, furniture, etc., from brown corn fiber and other fibrous materials; **A. Blair Ridginton, Pres., St. Louis, Mo.; Geo. A. Lowry, V.P., Jacksonville; F. L. Ridginton, Secy., St. Louis, Mo.**

**Ga.** Moultrie—Creamery.—**Moultrie Creamery & Produce Co.** organized by **H. H. Rothe and C. L. Brooks;** purchased **Moultrie Creamery;** will improve and enlarge; install oil-storage equipment.

**Mo.** Kansas City — Creamery. — **American Butter Co., J. S. Carpenter, Pres., 540 Walnut St.,** will erect 1-story and basement fireproof building; cost \$25,000; install 25-ton ice machine, 60 H. P. boiler and motors; manufacture creamery butter. Lately noted purchasing 50x125 ft. site. (See Machinery Wanted—Ice Machinery; Boiler; Motors.)

**Mo.** Kansas City—Veterinary Supplies.—**Jensen Salsbery Laboratories** let contract **Carlson & Lindahl, 319 W. 46th St., Kansas City,** at \$65,000 to erect laboratory for veterinary supplies; 3 stories and basement; 125x50 ft.; reinforced concrete; install vapor heating plant, electric lighting and electric elevators; **Ernest O. Brostrom, Archt., 212 Billings Bldg., Kansas City.** (Noted in June.)

**Mo.** St. Louis — Flashlights, Telephones, etc.—**Alax Electric Specialty Co., 1408 Morgan St.,** organized; **Ernest Alschuler, Pres.; Mgr.: J. S. Cumming, V.P.; Oscar Walters, Secy.;** has building; install special machinery; manufacture flashlights, telephones and plural plug sockets. Lately noted chartered, \$50,000 capital. (See Machinery Wanted—Battery Machinery.)

**Okla.** Muskogee — Electric Batteries.—**Peabody Battery & Starter Co.,** capital \$500, inceptd. by **A. D. Peabody, S. O. Wood and F. H. Nelson.**

**Okla.** Tulsa—Fire Apparatus.—**Rowe Fire Apparatus Co., 216 Wayne Bldg., 211 E. 2nd St.,** organized; **H. Ernest Rowe, Pres.; Mgr.: Geo. M. Medley, V.P.** (Lately noted inceptd., \$10,000 capital.)

**Tenn.** Bristol—Drugs.—**Turner Chemical Corp., Jere Bunting, Secy.-Mgr.,** will lease building; manufacture Balm (specialty), other drugs and chemicals; install machinery for making salve, filling jars and labeling. (Lately noted organized, etc., capital \$100,000.)

**Tenn.** Chattanooga.—**Union Mfg. Co.,** capital \$150, inceptd. by **Howard Neeley, Oscar Bare, Roy Scott and others.**

**Tenn.** Chattanooga—Silicon Alloy.—**Chattanooga Electro-Metals Co.,** capital \$200,000, organized; **Paul J. Kruesi** (Pres. Southern Ferro-Alloys Co.), **Pres.-Treas.: N. Thayer Montague, Ist V.P. and Secy.; G. L. Davidson, 2d V.P. and Mgr.; Arthur Raymo, Gen. Supt.; D. H. Cowan, Asst. Supt.;** build plant; erect steel-frame main building with galvanized roof and sides; 2 smaller buildings for transformers and automatic electrodes; daily capacity, 18 tons ferro-silicon; use carbon electrodes 2 ft. in diam. and 7 ft. long, 1 daily to be required.

**Tex.** Orange—Drugs.—**Orange Drug Co.,** capital \$12,500, inceptd. by **T. B. Forse, W. R. Cummings, Jr., and W. A. Gunning.**

**Tex.** San Antonio—Honey.—**Texas Honey Producers' Assn., 1105 S. Flores St.,** organized; **Lewis H. Scholl, Pres., New Braunfels, Tex.; E. B. Ault, V.P., Calallen, Tex.; E. G. Le Stourgeon, Secy.; A. M. Hasselbauer, Mgr.;** both of San Antonio. (Lately noted inceptd., \$15,000 capital.)

**Va.** Clinchfield—Carbocool.—**International Coal Products Corp., Charles H. Smith, Pres., 24 Broad St., New York,** will build plant manufacturing carbocool; organizing Clinchfield Carbocool Corp. to operate plant; distill coal to recover toluol, benzol, naphtha, ammonia, cresote, etc.; manufacture residue into fuel briquets; first unit to have annual capacity several hundred thousand tons coal; eventual capacity to be 1,500,000 tons; establish plant under auspices of Government, which will buy distilled products; awarded contracts for construction and equipment; ordered machinery from **Bartlett Hayward Co., Baltimore, Link-Belt Co., Philadelphia, Malcolmson Briquet Engineering Co., Chicago, and Diller-March Co., Perth Amboy, N. J.; Ford, Bacon & Davis, Engrs., 115 Broadway, New York.** (War Dept. lately noted to build \$5,000,000 plant manufacturing products for war purposes.)

**Va.** Danville—Leather, etc.—**Ocean Leather Co.,** organized by **Dr. Russell J. Coles;** tan leather from shark hides.

**Va.** Richmond—Corrugated Paper Products.—**Richmond Corrugated Paper Co., 20 Governor St. (B. W. Wilson Paper Co., owner),** will occupy building for which contract has been let to **R. M. Anderson & Co., Richmond;** plans by **H. T. Barnham, Richmond;** mill-construction, 40x180-ft., 2-story building; combined floor space of new and present buildings, 28,000 ft.; install corrugating and printing machinery; manufactures corrugated paper products.

**Va.** Richmond—Nitrogen, etc.—**K. T. Crowley, Industrial Agent of Chesapeake & Ohio Ry.,** has arranged for location of plant manufacturing nitrogen, oxygen, acetylene and other gases; 400x100-ft. main factory, warehouses and other structures; wires **Manufacturers Record;** Parties interested not ready to give information.

**W. Va.** Charleston—Rubber.—**West Virginia National Rubber Co.,** capital \$50,000, inceptd. by **Elmer E. Erb, E. M. Jauss and M. C. Miller,** all of Harrisburg, Pa.

**W. Va.** Huntington—Violins.—**Frederick-Banks Violin Co.,** chartered by **Will B. Frederick, W. H. Banks, C. T. Taylor and others;** capital \$75,000.

**W. Va.** Norfolk—Bakery.—**White House Baking Co.** will rebuild plant reported burned at loss of \$30,000 to \$35,000.

## MOTOR CARS, GARAGES, TIRES, ETC.

**Ark.** Little Rock—Garage.—**Chas. E. Forrest, Pres., Mutual Motors Co.** organizing company to build garage for general automobile and motor-truck repairing.

**D. C.** Washington—Automobiles.—**Auburn Automobile Sales Co., 26th and Pennsylvania Aves.,** will have plans and specifications prepared by **Milburn, Helster & Co., Union Savings Bank Bldg., Washington, D. C.,** for 60x150 ft. fireproof 2-story and basement building; cost \$175,000; reinforced concrete construction; slag roof; electric lights; steam heat.

**La.** Hammond—Motor Trucks.—**Richard Carter Co.,** capital \$99,000, inceptd.; **A. R. Carter, Pres.-Mgr.; E. W. Norton, V.P.; T. M. Wamamaker, Secy.-Treas.;** building plans not decided; install machinery to manufacture 1-ton steam trucks. (See Machinery Wanted—Boilers.)

**Md.** Baltimore—Garage.—**Wilcox & Ziegler, Monument and Alsouth Sts.,** will build garage to cost \$10,000. (Lately noted letting contract to **John H. Kelly, 1208 E. Biddle St.**)

**Md.** Baltimore—Garage.—**J. J. Dubholde, 724 N. Howard St.,** contemplates erecting garage; 125x150 ft.; 2 stories.

**Md.** Baltimore—Garage.—**John Boyle Packing Co., 1818 Thames St.,** let contract **J. Furman, 554 W. Lee St., Baltimore,** to erect garage; 2 stories; 52x750 ft.; brick, timber and concrete; cost \$60,000. (Lately noted.)

**Md.** Cumberland—Automobile Tires.—**Kelly-Springfield Tire Co., Akron, Ohio,** is having plans and specifications prepared for construction 650x85-ft., 1-story, reinforced concrete, steel and brick factory building; **S. Diescher & Sons, Engrs., Farmers Bank Bldg., Pittsburgh, Pa.** (Previously noted to invest \$5,000,000 for land, buildings, machinery, electric-lighting system, power plant, etc., for factory to have annual capacity exceeding 400,000 tons automobile tires and similar products; contracts let for \$1,250,000 equipment of machinery; other details also were reported.)

**Mo.** St. Louis—Garage.—**Chas. Herman** let contract **H. Schmidt, 4161 Florissant Ave., St. Louis,** to erect garage; 1 story; 45x45 ft.; plans by **F. Hesser, St. Louis.**

**Tex.** Orange — Automobiles. — **Blumberg Motor Co.,** capital \$100,000, inceptd.; **H. G. Blumberg, Pres.; E. W. Anderson and E. O. Dean, V.P.s; J. M. Dullahan, Secy.-Treas.;** **W. E. McCorquodale, Mgr.**

**Tex.** Texarkana — Motor-truck Bodies. — **Wallace Bros. Co., of San Antonio, Tex.,** plans organization \$50,000 company to build branch plant manufacturing commercial bodies for motor trucks.

**Va.** Norfolk—Garage and Industrial Building.—**David Cain, Lorraine Hotel,** has plans by **Philip B. Moser, Law Bldg., Norfolk,** for garage and industrial building; 75x110 ft.; cost \$40,000.

## RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

**Md.** Baltimore.—**Pennsylvania R. R., Alex. C. Shand, Chief Engr., Philadelphia, Pa.,** will erect ash pit and sand building at Mount Royal Yards; plans prepared by railroad's engineers provide for 1-story building of reinforced concrete and steel; **Milton C. Davis, 202 W. 26th St.; David M. Andrew Co., Mt. Vernon Ave. and 26th St., and Singer-Pentz Co., Equitable Bldg., all of Baltimore,** will submit estimates.

**Mo.** Kansas City.—**Chicago Great Western R. R., C. G. Dele, Chief Engr., Chicago,** will construct mechanical plant coaling station, balance bucket type; concrete pit and foundation; timber superstructure; 110-ton pocket supported on scales will contain coal to be weighed to engine tender. (Contract lately noted let to **Railroad Water & Coal Handling Co., Chicago;** cost \$20,000.)

**Va.** Big Stone Gap.—**Southern Ry., R. Herman, Engr., Charlotte, N. C.,** will construct shops and yards.

**Va.** Richmond.—**Richmond, Fredericksburg & Potomac R. R., W. D. Duke, Gen. Supt.,** will build signal tower at Acca yards to cost \$7500; let contract **P. J. White & Son of Richmond.**

## ROAD AND STREET WORK

**Ala.** Camp Sheridan.—**War Department** let contract **Simmons, Hartenstein & Whitton of Charlotte, N. C.,** at \$200,000 to construct highway at Camp Sheridan, near Montgomery; **Capt. M. G. McDonald, Camp Construction Quartermaster.** (Lately noted.)

**Ala.** Evergreen.—**Conecuh County Comms.** will construct sand-clay roads; \$35,000 available; date of opening bids not set; **Engr. J. M. Garrett, Montgomery.**

**Ala.** Tuskegee.—**Macon County Comms.** let contract **Stanley & Singer Construction Co., La Fayette, Ala.,** to construct 4-mi. sand-clay road to be part of Dixie-Overland Highway.

**Ark.** Ashdown.—**Little River County Road Improvement Dist. No. 6, Joel Mills, Secy., Wilton, Ark.,** will construct 11 mi. gravel road; open bids August 30; **Parkes Engineering Co., Engr., Pine Bluff, Ark.** (See Machinery Wanted—Road Construction.)

**Ark.** Camden.—**Ouachita County Comms.** have plans by **State Highway Dept., Little Rock,** for construction of series of roads radiating around Camden, which will include Buena Vista, Childster, Mustin Lake and Kent; system will be 18 mi. long of gravel and graded earth construction; cost \$74,457.35.

**Ark.** Clarendon.—**Monroe County Road Improvement Dist., Elmo Chaney, Secy., Brinkley, Ark.,** will construct 8 mi. concrete and 14 mi. gravel road; open bids Sept. 6 for the gravel road construction; **Parkes Engineering Co., Engr., Pine Bluff, Ark.** (See Machinery Wanted—Road Construction.)

**Ark.** Hope.—**City** contemplates street paving. Address The Mayor.

**Ark.** Lonoke.—**Lonoke County, Road Dist. No. 3,** will construct 2 mi. of macadam road and 11 mi. of resurfacing; **J. E. Hicks, Chmn., Board Road Dist. No. 3, England, Ark.,** receives bids until Sept. 13. (See Machinery Wanted—Road Construction.)

**Ark.** Ponchartrons.—**Randolph County, Road Dist. No. 3,** will construct 9.4 mi. macadam road; 54,000 cu. yds. excavation, 8218 lbs. reinforcing steel, 8396 cu. yds. local crushed stone surfacing, etc.; \$75,000 available; **Dist. Road Comms., W. L. Pope, Secy.,** receive bids until Sept. 2; **Pritchett & Hight, Engr., Walnut Ridge, Ark.** Lately noted. (See Machinery Wanted—Road Construction.)

**Ark.** Sheridan.—**Grant County Comms.** organized district to construct road from Sheridan to Dallas County line; let engineering contract to **W. J. Parkes Engineering Co., Pine Bluff.**

**Ark.** Sheridan.—**Grant County Road Improvement Dist. No. 2, W. R. Rhodes, Secy., Erin, Ark.,** will construct 14½ mi. gravel road; date for opening bids not set; probably late in September or early in October; **Parkes Engineering Co., Engr., Pine Bluff, Ark.** (Lately noted to construct road from Sheridan through Millerville to Dallas County line; issued \$50,000 bonds.)

**D. C.** Washington.—**Comms. District of Columbia** let contract **Cranford Paving Co., 3622 E St. N. W., Washington,** at \$25,000 for paving in Judiciary Park.

**Fla.** Arcadia.—**State Road Dept., Ed Scott, Chmn., Tallahassee,** let contract **Logan Brothers of Tampa** to construct concrete road to Carlstrom aviation field and 2½ mi. of concrete road to Door field; remainder of road to Door field, 2½ mi., to be of brick.

**Fla.** Key West.—**City** invites bids until Sept. 18 for 30,000 sq. yds. surface treatment of asphalt paving cement; **Harold Pinder, Clerk.** (See Machinery Wanted—Paving.)

**Fla.** Pensacola.—**Escambia County Comms.** have \$10,000 State appropriation and will contribute \$10,000 additional to improve road from Pensacola to Molino to connect with Molino bridge.

**Fla.** Pensacola.—**Government** will pave streets and sidewalks, construct sewers and install electric-lighting system in connection with development of townsite south of Bayou Grande, to comprise 100 houses which it is understood will be used for civilian employees of navy yard; **Arthur Pew, Engr., Pensacola.**

**La.** Shreveport.—**City** will pave Highland Ave. and Kings Highway, from Wilkinson to Wesley Sts.; bids opened August 27; **R. H. Ward, Commr. Accounts and Finance.** (See Machinery Wanted—Paving.)

**Miss.** Fulton.—**Itawamba County Comms.** let contract **W. M. Guthrie of Fulton** for excavation of 24 mi. of roads, from Itawamba to Lee County line.

**Miss.** Woodville.—**Wilkinson County** voted \$60,000 to construct Prentiss Highway through county. Address County Comms. (Lately noted to vote.)

**Mo.** Kansas City.—**Board of Public Works** plans to repave Twelfth St., from Broadway to Troost St., and 14th St., from Broad to Main St.

**Mo.** Kansas City.—**City** let contract **P. F. Gray Material & Construction Co., 1825 Vine St., Kansas City,** at \$15,580 to pave Mersington St.; **Ed Megan, 33d and Swope Sts.,** at \$354 to grade 56th St., and **J. C. Lyle, Grand Ave. Temple,** at \$2279 for paving; all of Kansas City.

**Okla.** Idabel.—**State Department of Highways, State Capitol Bldg., Oklahoma City,** will improve road from Broken Bow to Behtel, McCurtain County, Federal Aid Dist. No. 2; work involves grading, masonry work, gravel and sand-clay surfacing, clearing, etc.; bids opened August 26; **Geo. B. Noble, Commr. of Highways; Max L. Cunningham, State Engr.;** both of Oklahoma City. (See Machinery Wanted—Road Construction.)

**Tenn.** Bristol.—**Cities of Bristol, Va. and Tenn.,** will grade and pave State St., about 20,000 sq. yds. concrete and asphalt paving; **Recorder, Bristol, Tenn.,** and **City Clerk, Bristol, Va.,** receive bids until Sept. 23; **Recorder, Bristol, Tenn.,** also receives bids until Sept. 23 for 5000 sq. yds. paving, and **City Clerk, Bristol, Va.,** for 6000 sq. yds. **A. J. Roller and J. T. Crell, Joint Committee.** Lately noted. (See Machinery Wanted—Paving.)

**Tenn.** Newport.—**Cocke County Comms.** have \$50,000 appropriation from State Highway Comms., Nashville, to complete 10-mi. gap on Carolina division of Dixie Highway, which is routed between Knoxville and Asheville.

**Tex.** Bay City.—**Matagorda County, Road Dist. No. 8** voted \$65,000 bonds to construct 5 mi. of shell road from Bay City to Matagorda and Big Hill sulphur fields. **John F. Perry, County Judge.** (Lately noted to vote.)

**Tex.** Brenham.—**City, Wm. Lusk, Mayor,** contemplates paving several blocks business streets; probably concrete construction.

**Tex.** Cuero.—**De Witt County, Road Dist. No. 4,** voted \$40,000 bonds to improve 13 mi. of Middlebusher Highway, mainly between Cuero and Victoria County line; \$34,825.51 State-aid. **J. L. Boal, County Judge.** (Supersedes recent item.)

**Tex.** Dallas.—**Dallas County Comms., Dallas, and Tarrant County Comms., Fort Worth,** contemplanate construction of concrete or other permanent highway from Dallas to Fort Worth; Dallas County has \$300,000 available for its section of road; **Tarrant County** to build road from county line to Arlington.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



Tex., Sulphur Springs.—Hopkins County is reported to have voted \$55,000 bonds for road construction. Address County Commrs.

Tex., Wheeler.—Wheeler County will construct 28 mi. sand-clay road; 16,253 cu. yds. earth excavation; 35,700 lin. ft. machine grading; 123.7 cu. yds. concrete pavement, etc.; County Clerk receives bids until Sept. 2; L. D. Miller, County Judge; Hess & Skinner, Const., Engrs., Dallas. (See Machinery Wanted—Road Construction.)

Va., Bristol.—Cities of Bristol, Va. and Tenn., will grade and pave State St., about 2,000 sq. yds. concrete and asphalt paving; Recorder, Bristol, Tenn., and City Clerk, Bristol, Va., receive bids until Sept. 23; Recorder, Bristol, Tenn., also receives bids until Sept. 23 for 5000 sq. yds. paving, and City Clerk, Bristol, Va., for 6000 sq. yds. A. J. Roller and J. T. Cecil, Joint Committee. Lately noted. (See Machinery Wanted—Paving.)

### SEWER CONSTRUCTION

Ala., Talladega.—Talladega County Commrs. appropriated \$500 toward construction of sanitation system in county; State will contribute \$500.

Ala., Huntsville.—Madison County Commrs. and City of Huntsville voted total of \$7500 toward construction of sanitation system in county; State will contribute \$7500.

Ark., Morrilton.—City is having plans prepared by Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, for sewer to cost \$20,000; Jeff Wright, Mayor. (Noted in June.)

Fla., Pensacola.—Government will construct sewers in connection with townsite development south of Bayou Grande; Arthur Pew, Engr., Pensacola. (See Road and Street Work.)

Fla., Tampa.—City will construct storm sewers; cost \$15,000; D. B. McKay, Chmn. Commrs. of Public Works.

Ga., Thomson.—City, C. A. Farmer, Clerk, will construct sewers; cost \$21,000; A. T. Still, Engr. Bonds lately noted voted. (See Machinery Wanted—Sewer-construction Materials.)

Okla., Duncan.—City, J. B. McLendon, Mayor, opens bids Sept. 9 on 38,000 ft. lateral sewers, Dist. No. 1; votes Sept. 2 on bonds; afterward arrange to let contract for sewer-disposal plant; Benham Engineering Co., Engr., Colcord Bldg., Oklahoma City. Lately noted. (See Machinery Wanted—Sewer Construction.)

Tex., Terrell.—Directors North Texas Hospital for Insane, Geo. F. Powell, Supt., will construct sewage-disposal plant; bids opened August 26; A. D. Dink, Const. Engr., Greenville, Tex. (See Machinery Wanted—Sewage-disposal Plant.)

Va., Portsmouth.—City contemplates construction of sewer system; considering \$250 appropriation for securing data and preparing plans. Jos. Weaver, City Engr.

### SHIPBUILDING PLANTS

Fla., St. Petersburg.—St. Petersburg Maritime & Construction Co., capital stock \$250,000, inceptd. by R. L. West, F. R. Francke and W. H. Franklin.

Fla., Tampa.—Wooden Barges.—Emergency Fleet Corp., Washington, will build shipyard to construct 2500-ton wooden barges; seeking site on waterfront; plant to employ 1200 men.

Ga., Brunswick.—Steel Steamships.—American Shipbuilding Co. will build addition to comprise facilities for constructing and installing machinery in Government ships.

La., New Orleans.—Steel Steamships.—Emergency Fleet Corporation, W. P. Nelson, District Agent for concrete and wood ship construction, will build 10,000-ton drydock with accompanying facilities; expenditure \$1,250,000; provide plant to repair all vessels entering port; complete by Jan. 1; has waterfront site; construct in sections; for use independently or as one unit; completed plant to employ 400 men.

La., New Orleans.—Wooden Steamships.—Jahnke Shipbuilding Co. has plans and specifications for additional drydock; build under authority Emergency Fleet Corporation; additional dock for 4500-ton vessels; progressing with construction 10,000-ton drydock previously announced; arrange both docks for use as single unit when required; equipment will include facilities to construct 3-masted schooners with auxiliary power equipment. (Lately noted.)

### TEXTILE MILLS

Ala., Anniston.—Cotton Goods.—Calhoun Cotton Mills, capital \$100,000, inceptd. by Wm. Bennett, Seymour Rosedale and A. E. Campbell.

Ala., Huntsville.—Cotton Duck, etc.—Abingdon Mills will, it is reported, build an additional mill; has 28,080 ring spindles and 166 looms.

Ga., Toccoa.—Cotton Products.—Toccoa Cotton Mills plan installation additional new machinery.

Md., Baltimore.—Cotton Cloth.—Mt. Vernon-Woodberry Mills will erect additional building, 98x44.6 ft., on Falls Road and Northern Central R. R.; plans by Jos. Evans Sperry, 109 Calvert Bldg.; let contract to Gladfelter & Chambers, 36th St. and Roland Ave.; both of Baltimore.

N. C., Cumberland.—Cotton Yarn.—Necron-Mills will add 5000 spindles; erected addition and ordered machinery.

N. C., Mebane.—Hosiery.—Mebane Hosiery Mills organized; capital \$50,000; W. S. Crawford, Pres.; W. Y. Malone, V.-P.; C. E. Correll, Secy.-Treas.; has building; install 24 knitting machines; ordered equipment; daily capacity 150 dozen pairs half hose.

N. C., Shelby.—Hosiery.—Chas. A. Morrison will establish knitting mill; has building; ordered 10 knitters, etc.; electric power; daily capacity 50 dozen pairs men's hose.

S. C., Cheraw.—Knit Goods.—Pee Dee Knitting Mill, capital \$100,000, inceptd. by Robt. Chapman, Edward Malloy and S. T. A. McManus.

Tenn., Butler.—Textile Products.—Elk River Mfg. Co., organized; J. E. Reece, Pres.; J. H. Vaught, V.-P.; B. A. Lipford, Secy.-Treas.; has building; 40 H. P. steam plant; belt drive; cost of mill machinery, \$3000. (Lately noted inceptd., \$10,500 capital.)

### WATER-WORKS

Ky., Sifton.—War Department, Washington, will construct water-works and install refrigerating plant in connection with establishment of cantonment; John Griffith & Son of Chicago have large portion of general contract involving \$15,000,000.

Miss., Hattiesburg.—City contemplates improvements to water-works to cost about \$20,000; plans bond issue. J. H. Putnam, City Engr.

Mo., Vandalia.—City, W. T. Waters, Mayor, lately noted contemplating vote on \$8000 to \$10,000 bonds, plans to drill deep well within 3 months and install pump of 100 gals. per minute capacity.

Okla., Duncan.—City, J. B. McLendon, Mayor, contemplates improvements, cost \$50,000; extend mains and power-house; install two 500,000 G. P. M. electrical pumping units; vote on bonds Sept. 2; Benham Engineering Co., Engr., Colcord Bldg., Oklahoma City. (Lately noted.)

Okla., Geary.—City will drill 2 wells, one 20 ft. in diam. and 35 ft. deep, and other 24 ft. in diam. and 35 ft. deep; brick and reinforced concrete; bids opened August 22; H. E. Summers, City Clerk.

Okla., Guthrie.—City contemplates voting on \$165,000 bonds to improve water-works Benham Engineering Co., Engr., 1300 Colcord Bldg., Oklahoma City.

Okla., Hominy.—City, L. Hall, City Clerk, voted \$50,000 bonds to develop water supply and extend mains.

Okla., Lawton.—City will increase height of dam 10 ft. at Law-ton-ka; Board of Commrs., J. M. Haynes, Secy., receive bids until Sept. 3. (See Machinery Wanted—Dam Construction.)

Tex., Blythe.—City contemplates voting on \$25,000 bonds to construct water-works. Address The Mayor.

Tex., Eastland.—City contemplates constructing water-works. J. M. Weaver, Chmn. Committee.

Tex., Elctra.—City voted \$25,000 bonds to improve water-works. Address The Mayor.

Tex., Fort Worth.—City let contract W. T. Waggoner, First National Bank Bldg., Fort Worth, at \$52,387 to erect pump-house.

### WOODWORKING PLANTS

Ala., Mobile.—Cooperage.—Mobile Cooperage & Mfg. Co., capital \$50,000, inceptd. by L. Guy Larkins, E. A. Powell, E. W. Cawthon and others.

Fla., Miami.—Furniture, etc.—Theo. Hirsch Co., capital \$50,000, inceptd., Theo. Hirsch, Pres.-Treas.; C. Howard Norris, V.-P.; B. M. Hirsch, Secy.; build plant to manufacture furniture, store and office fixtures.

Ky., Somerset.—Staves.—I. R. Longworth Co. (wholesale dealer in hardwoods) will install machinery for sawing barrel staves. (See Machinery Wanted—Stave Saws.)

La., New Orleans.—Crates, etc.—Panna & Rosetta, 621 St. Philip St., will build plant to manufacture crates, boxes and barrels; have machinery for boxes, crates, etc.; later install barrel equipment.

Miss., Corinth.—Staves and Heading.—W. E. Small will build stave mill and heading factory.

Mo., St. Louis.—Opera Chairs.—Family Opera Chair Organization, capital \$10,000, inceptd. by John E. Reinhart, Raymond D. Wenkley, Herbert S. Gardner and others.

N. C., Asheville.—Treenails.—Black Locust Treenail Co., lately noted inceptd., \$20,000 capital, organized; advises Manufacturers Record; Daniel Ravenel, Pres.; Robt. P. Harris, V.-P. and Mgr.; C. W. Graybeal, Secy.; mills in North Carolina and Georgia; needs locust timber; has large Government contracts for treenails for wooden vessels. (See Machinery Wanted—Timber.)

### FIRE DAMAGE

Ala., Birmingham.—Magle City Cotton Oil Co.'s plant at 40th St. and 12th Ave., North; loss \$100,000.

Ala., Carrollton.—A. E. Bell's planing mill; loss \$50,000.

Ala., Gadsden.—W. E. McDonald's 4 dwellings.

Ala., Lomax.—Vida Lumber Co.'s plant; loss \$5000.

Ark., Forrest City.—Becker & Lewis' building; N. S. Caldwell's store; loss \$30,000.

Fla., Key West.—Alfred L. Reio's store; loss \$30,000.

Fla., Orlando.—J. B. Mills' residence; loss \$2500.

Ky., Georgetown.—Jas. L. Carrick's barn; loss several thousand dollars.

Ky., Owensboro.—Martin Miller's residence.

Ky., Owensboro.—Green River Distilling Co.'s plant.

La., Couchwood.—Weaver Bros. & Looney's lumber mill.

La., Monroe.—E. Dudicar's 2 barns on plantation, near Monroe.

La., Shreveport.—Residences of Joseph Maroun and J. M. Carens at 1049 and 1045 Sheridan Ave.

Md., Baltimore.—Fred. Stehr's blacksmith shop and stable on Erdman Ave., near Belair Road.

Md., Eastport.—Home Laundry Co.'s plant; loss \$30,000 to \$40,000.

Miss., Water Valley.—J. H. Gore's lumber plant; loss about \$60,000.

Mo., Knobnoster.—Aéme Milling Co.'s plant; loss \$50,000.

N. C., Hilton.—N. B. Josey Gause Co.'s plant; loss \$100,000.

S. C., Florence.—Mrs. Fannie Womack's boarding-house, owned by Mrs. C. M. Berry; loss \$7500.

S. C., York.—Piedmont Springs Hotel, 1 mi. from Kings Creek; John Castles, Mgr.; loss \$10,000.

Tenn., Franklin.—H. North Lorenz's residence.

Tex., Anderson.—H. B. Mallard's warehouse.

Tex., Direct.—Mrs. Ike Kennedy's home, 1 mi. south of Direct.

Tex., Gatesville.—Henry Armstrong's residence; loss \$3500.

Tex., Elmore.—J. D. Long's Cotton gin; loss \$10,000.

Tex., Houston.—Lucy Mfg. Corporation of Texas' machine shop at 1418 Carr St.; loss \$150,000.

Tex., Pecan Gap.—Underwood & Co.'s lace on farm near Pecan Gap; loss \$15,000.

Tex., Temple.—J. B. Watters' residence, barn and servant-house; loss \$4000.

Tex., Victoria.—Farmers' Loan Assn. building; reported loss \$15,000.

Tex., Yoakum.—J. W. Cook's residence; loss \$7000.

Va., Baskerville.—Union Corporation's store; Edmondson & Hutchinson's store.

Va., Freeling.—Jas. B. Hawkins' residence.

Va., Pochontas.—Bowman Brothers' store; loss \$8000 to \$10,000.

Va., Portsmouth.—Four single 2-story houses, one completed and three nearing completion, frame, metal roof with heat and electric lighting, owned by Parker & Mulvey, Inc., 313 High St.; loss \$29,000 to \$2500 each.

Va., Newport News.—Chesapeake & Va. Ry.'s freight depot; loss \$20,000; F. I. Child, Chief Engr., Richmond.

W. Va., Northfork.—White House Baking Co.'s plant; loss \$30,000 to \$35,000.

## BUILDING NEWS

### BUILDINGS PROPOSED

#### APARTMENT-HOUSES

Mo., St. Louis.—H. L. Schaefer, 5036 Devonshire St., has plans by O. J. Popp, 891 Odd Fellows' Bldg., St. Louis, for proposed apartment-house; 2 stories; 24x44 ft.; cost \$5000; construction by owner.

Va., Alexandria.—Drury & Borland have plans by W. Leon Clark, 2209 Fairfax St., Alexandria, for alterations and additions to luncheon and apartment-house. (See Miscellaneous Structures.)

#### ASSOCIATION AND FRATERNAL

Fla., Arcadia.—National War Work Council, Young Women's Christian Assn., Gertrude Mayo, Supvrs., 655 Lexington Ave., New York, will erect hostess-houses at Carlstrom and Dorr Fields.

Fla., Jacksonville.—National War Work Council, Young Men's Christian Assn., 347 Madison Ave., New York, will erect association building at Camp Johnston.

Fla., Jacksonville.—Jewish Welfare Board will erect building at Camp Johnston; auditorium with seating capacity of 1000; cost \$10,000; Sol Landsman, Camp Director of Jewish Welfare Board.

Ga., Augusta.—National War Work Council, Young Men's Christian Assn., 347 Madison Ave., New York, will erect "Y" building at Camp Hancock.

Ga., Brunswick.—Labor Union, J. S. Sharlett, Business Mgr., will erect building; 3 stories; 60x90 ft.; brick; contain 3 stores, first-aid station and halls.

Ga., Port Oglethorpe.—National War Work Council, Young Men's Christian Assn., 347 Madison Ave., New York, will erect "Y" hut, 2 outdoor auditoriums and outpost building at camp.

Ga., Macon.—National War Work Council, Young Men's Christian Assn., 347 Madison Ave., New York, will erect 4 "Y" buildings at Camp Wheeler; for quartermaster corps, base hospital, remount station and rifle range; about 38x90 ft.; also improve 6 present structures, install lighting system, etc.; construction under supervision of J. Oliver Vining of "Y" staff; Harry H. Balsiger, Camp Secy.

N. C., Charlotte.—Young Women's Christian Assn. will not erect building as lately reported.

S. C., Charleston.—Building Committee Young Women's Christian Association opens bids Sept. 3 in office D. B. Hyer, Archt. People's Bldg., Charleston, to erect building 3 stories; 14x60 ft.; ordinary brick construction; tin roof; wood joist floor construction; vacuum steam heat; cost about \$65,000. (Lately noted.)

Va., Pennington.—E. I. du Pont de Nemours & Co. will erect 2 Young Men's Christian Association buildings to cost \$20,000 each.

W. Va., St. Albans.—Building Committee of Carpenters' Hall, Room 7, Interstate Station, receives bids until Sept. 1 to erect hall; plans and specifications at above office.

#### BANK AND OFFICE

Ark., Marianna.—S. H. Crow will probably erect office building to replace structure lately noted damaged by fire at loss of \$10,000.

D. C., Washington.—International Machinists' Union is having plans prepared by Milburn, Heister & Co., Union Savings Bank, Washington, for office building at 14 St. and Massachusetts Ave.; 65x100 ft.; 3 stories and basement; fireproof; concrete steel frame; vapor steam heat; slag and electric elevators; cost \$140,000; contract to be let in early fall.

Fla., Cocoa.—Bank of Cocoa is having plans prepared by Richard W. Rummell, 20 Courtenay, Fla., for alterations and addition to bank building; reinforced concrete; architect desires names of contractors who would like to bid on construction and could build at once.

Md., Baltimore.—Crown Cork & Seal Co. John M. Hood, Jr., Pres., is having plans prepared by Otto G. Simonsen, Maryland Casualty Tower, Baltimore, for building to be used for information, hospital and employment purposes.

Md., Indian Head.—Bureau of Housing Department of Labor, Otto M. Elditt, Director, Mills Bldg., Washington, is having plans prepared by Donn & Deming, 88 210

H. Gore's

Mrs. C. M. Berry

Fannie W. Berry

Springs Hotel

Mallard's

Kennedy's

Armstrong's

G. Corporation

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August 29, 1918.]

St. Washington, for number 2½-story dwell-

ings; cost about \$500,000. (Lately noted.)

Mrs. Clarkdale—Somers &amp; Landry will

erect business building; 7 stores and about

20 offices. (See Stores.)

Mrs. Quitman—Bank of Quitman will

erect 2-story bank building; 8. H. Terral,

Pres.

Mo., Bloomfield—Stoddard County Trust

Co. is having plans prepared by W. E. Par-

son, Cape Girardeau, Mo., for bank building;

1 story; 35x75 ft.; fireproof; asphalt roof;

1 story; cost about \$20,000; address Architect.

Mo., Independence—National Supply Co.

is having plans prepared by Mills, Mines,

McLellan &amp; Nordhoff, 1234 Ohio Bldg., Toledo,

Ohio, for warehouse and office building; cost

\$15,000. (See Warehouses.)

Mo., St. Louis—Northwest Consolidated

Milling Co. has plans by W. P. McMahon,

Walworth Bldg., St. Louis, for storage

and office building; cost \$15,000. (See Ware-

houses.)

Mo., Tarkio—Tarkio Valley Bank is hav-

ing plans prepared by A. Moorman &amp; Co.,

318 Dearborn St., Chicago, Ill., and St.

Paul, Minn., for remodeling bank; 1 story;

30x60 ft.; cost \$22,000.

N. C., Greensboro—Southern Life &amp; Trust

Co. has plans by Charles Barton Keen, 1218

Chestnut St., Philadelphia, for office build-

ing; central building, 2 stories and base-

ment; 4x110 ft.; 2 wings, 1 story and base-

ment; 30x35 ft.; brick exterior walls; slate

roof; reinforced concrete floors; date open-

ing bids not determined. Address Architect.

(Lately noted.)

S. C., Andrews—Farmers &amp; Merchants

Bank, Dr. D. S. Porter, D. L. Moyd, J. M.

Telford and others, Directors, purchased build-

ing and will remodel for bank; cost, includ-

ing fixtures, etc., \$10,000; arranged for safe,

vault and fixtures.

Va., Norfolk—Brown Savings &amp; Banking

Co., E. C. Brown, Pres., increased capital

from \$10,000 to \$50,000 and will improve

building.

## CHURCHES

La., New Orleans—Central Baptist Church,

Rev. Dr. W. A. Jordan, Pastor, will erect

\$50,000 addition to present structure.

Mo., Independence—First Christian Church

receives bids in September to erect build-

ing; 2 stories; brick; cost \$70,000; J. H.

Felt &amp; Co., Grand Avenue Temple, Kansas

City, Mo. (Previously noted.)

N. C., Statesville—Union Grove Church

will rebuild structure lately noted damaged

by fire; S. S. Templeton, S. A. Trivette, T.

M. Jurney and others, Building Committee.

W. Va., Dunbar—Brotherhood of Brethren

Presbyterian Church will erect temporary

structure; 25x40 ft. Address The Pastor.

## CITY AND COUNTY

Ark., Hope—City Hall, Auditorium, etc.—

City indefinitely postponed erection of city

hall, auditorium, etc.; cost about \$75,000;

Rotary Club, Talbot Field, Secy., interested.

(Previously noted.)

Fla., Arcadia—City will defer erection of

city hall. (Lately noted.)

Ky., Southgate—Firehouse—City has plans

by L. N. Wilson, 10 W. 4th St., Newport,

Ky., for firehouse; 1 story; 21x75x26 ft.;

cost \$6000.

Md., Baltimore—Convention Hall—Board

of Estimates will authorize Carere &amp; Has-

tings, 4th St. and Vanderbilt Ave., New

York, to prepare plans for convention hall

at Fallway end of Civic Center; accom-

modate about 15,000; cost \$800,000; beginning

of construction indefinite; plans arranged to

permit expansion later if desired.

Mo., St. Louis—Engine-house—Board of

Public Service, Wm. T. Findly, Secy., Room

28, City Hall, receives bids until Sept. 6 to

erect engine-house No. 3; also for install-

ing plumbing, heating, drainage and gas

fitting.

Okla., Pauls Valley—Auditorium—City re-

ceives bids through J. H. Leedy, Archt.,

Pauls Valley, until Sept. 7 to erect audi-

torium.

Tex., Fort Worth—Lavatories—Park Board

will construct 17 concrete sanitary vault

lavatories in parks and public places.

W. Va., Hinton—Jail—Summers County

Comms. are considering erecting jail.

## COURTHOUSES

Ky., Pineville—Bell County, E. N. Ingram,

Judge, will erect courthouse to replace

structure previously noted damaged by fire; brick

and stone; fireproof; roofing not decided;

concrete or terrazzo floors; steam heat; elec-

tric lights; cost \$75,000; lets contract about

first of year; construction begins in spring.

(Lately noted to vote Nov. 1 on \$75,000 bonds

to erect building.)

## DWELLINGS

Ala., Tusculum—O. B. Clark will erect 3

bungalows.

Ark., Little Rock—M. A. Youngblood will

erect 2-story bungalow; cost \$3250.

Ark., Little Rock—S. R. Byarly will re-

model 2-story residence, 612 E. Capitol Ave.;

cost \$8000.

D. C., Washington—Hugh Wallis is having

plans prepared by Milburn, Heister &amp; Co.,

710 14th St. N. W., Washington, for resi-

dence; steam heat; slate roof; stucco ex-

terior finish; plans ready August 25.

Fla., Miami—Bennett &amp; Kirkland have

permit to erect \$6000 residence in Garden of

Eden.

Fla., Miami—G. L. Knight will erect resi-

dence; cost \$2000.

Fla., Pensacola—Bureau of Industrial

Housing, Department of Labor, Washington,

will develop industrial village on Bayou

Grande for employees at navy-yard; will

erect dwellings, etc. (See Government and

State.)

Ga., Brunswick—United States Shipping

Board, Emergency Fleet Corp., Philadelphia,

will expend about \$750,000 for erection of

dwellings for shipyard employees. (See Gov-

ernment and State.)

Ga., Lela—P. E. Dennis, Citizens' &amp; South-

ern Bank Bldg., Macon, is preparing plans

for residence; 1 story; frame; hardwood

frames; brick mantels; plumbing; electric

lights; cost \$15,000.

Ky., Lexington—Mrs. C. H. Berryman in-

definitely postponed erection of residence;

plans by Val P. Collins, Louisville, call for

brick and stucco; 40x105 ft.; slate roof;

wood floors; vapor heat; city electric light-

ing. (Previously noted.)

La., New Orleans—William Bacher will

erect residence.

La., New Orleans—Navy Department,

Washington, has plans for fifty 4-room,

fifty 6-room and 4 superintendents' dwell-

ings; also restaurant; plans to erect 100

additional houses later.

La., Shreveport—C. Selber will remodel 2-

story frame residence; cost \$3500.

La., Shreveport—S. E. Carter will erect

dwelling; frame; cost \$590.

La., Shreveport—T. P. Whittington will

erect residence; 2 stories; frame; cost \$2500.

Md., Baltimore—George Klein has plans by

George Wessel, 614 N. DuKeland St., Balti-

more, for eight 2-story dwellings at 2301-15

Baker St.; brick; 14x46 ft.; Carey roofs;

hot-air heat; cost \$13,600; construction by

owner. (Lately noted.)

Md., Glencoe—Samuel Shriver is having

plans prepared by Theo. Wells Pletsch,

American Bldg., Baltimore, for cottages;

2½ stories; 30x50 ft.; frame; cost \$3000.

Mo., Kansas City—G. A. Goudie, 22d and

Grand Ave., is having plans prepared by

Shopard, Farrar &amp; Wisner, R. A. Long Bldg.,

Kansas City, for dwelling; 2 stories and

basement; 60x80 ft.; brick; stone trim; shingle

roof; construction by owner; day labor.

Mo., St. Louis—D. Roberts will erect addi-

tion to dwelling; also alter garage; cost

\$3100.

Okla., Oklahoma City—E. B. Bingham will

erect residence; brick; cost \$5000.

Okla., Oklahoma City—S. E. Davis will

erect frame dwelling; cost \$3000.

Okla., Oklahoma City—Helen E. Lowhead

will expend \$2000 to remodel dwelling at 1216

W. 36th St.

Okla., Oklahoma City—W. T. Laughlin will

erect dwelling; frame; cost \$2400.

Okla., Tulsa—E. A. Dumit will erect dwel-

ling; frame; cost \$2500.

Okla., Tulsa—H. Appleman will erect

dwelling; 2 stories; stone, brick and stucco;

cost \$2600.

Okla., Tulsa—W. H. McAbee will erect

\$2500 residence; frame.

Okla., Tulsa—W. K. Raper will erect resi-

dence; frame; cost \$3000.

S. C., Charleston—L. D. Long &amp; Co. will

erect 42 dwellings to cost \$150,000, including

9 bungalows.

Tex., Beaumont—H. Mullen will erect

residence; 5 rooms; cost \$3000.

Tex., Beaumont—T. Tartoris will erect 6

dwellings; cost \$3000.

Tex., Beaumont—W. A. Bowie will expend

\$7000 to remodel residence.

Tex., Fort Worth—Joe S. Hubbard will

erect two 1-story dwellings; frame; cost

\$2000.

Tex., Fort Worth—G. Gunter will erect

frame dwelling; cost \$2500.

Tex., Fort Worth—A. W. Dilsoil will erect

2-story brick-veneer dwelling; cost \$4500.

Tex., Fort Worth—Lon Keeble will erect

dwelling; 1 story; brick; cost \$4000.

Tex., Fort Worth—Ruben &amp; Cashner will

erect two 1-story frame dwellings; cost \$3000.

Tex., Fort Worth—W. S. Wright will

erect dwelling; 1 story; brick veneer; cost

\$6500.

Tex., Fort Worth—M. M. Brown will erect

frame residence; cost \$3000.

Tex., Houston—Houston Land Corporation

will erect residence; 7 rooms; frame and

stucco; also erect garage; cost \$5000.

Tex., Houston—J. D. Northrup will erect

two 4-room dwellings; cost \$3000.

Tex., San Antonio—D. Bowman will erect

dwelling; 5 rooms; cost \$2400.

Tex., San Antonio—G. W. Stephens will

erect 6-room dwelling; cost \$3000.

Tex., San Antonio—J. F. Miller will erect

\$2500 dwelling; 5 rooms.

Tex., San Antonio—L. Bizy will erect

dwelling; 5 rooms; cost \$2500.

Tex., San Antonio—N. Dayton will erect

residence; 6 rooms; cost \$4000.

Va., Big Stone Gap—Big Stone Gap Land

Co. will erect 150 dwellings for employees of

Southern Ry. Co.

W. Va., Charleston—L. F. Shannon, 316

Kentucky Ave., will erect 2 dwellings; 1

story; 24x30 ft.; frame; cost \$2500 each.

W. Va., Parkersburg—Frank S. Smith in-

definitely postponed erection of dwelling;

plans by Wm. Howe Patton, Parkersburg,

call for brick construction; 35x60 ft.; slag

roof. (Lately noted.)

## GOVERNMENT AND STATE

D. C., Anacostia—Aviation Field—War

Dept., Washington, will enlarge Bolling

flying field; erect additional hangar and

quarters for 23 officers and 154 men; con-

struct new repair shop, machine shop and

build barb wire fence around field.

Fla., Pensacola—Dwellings—Bureau of In-

dustrial Housing, Department of Labor,

Washington, will develop industrial village

on Bayou Grande for employees at navy-yard;

erect 100 dwellings, bungalow type; 4, 5 or 6

rooms; provide parkways; construct streets,

sidewalks, install sewerage, lights, etc.;

Arthur Pew, Projecting Engr. for Govern-

ment; estimated cost \$800,000.

Ga., Brunswick—Dwellings—United States



Station, Baltimore, will erect buildings at terminals.

Okla., Copan. — Independent School Dist. No. 4, A. B. Sparks, Secy., is having plans prepared by C. A. Henderson, Kellogg Bldg., Coffeyville, Kan., for dormitory; 2 stories and basement; 34x74 ft.; cost \$25,000.

Tex., Beaumont. — Southern Pacific Co., W. Hood, Chief Engr., San Francisco, Cal., will remodel depot; cost \$3000.

Va., Seven Pines. — E. I. du Pont de Nemours & Co. will construct passenger station 5 blocks long over Dock St. to accommodate employees; plans by E. S. Higgins, company's engineer.

Va., Tunstall. — Tunstall School Dist. will erect 3-room building at Coates School on Henry County Road; bids received at office Heard, Cardwell & Chesterman, Archts., Rooms 8 and 9 Arcade Bldg., Danville, Va., until August 26.

Ala., Birmingham. — Jefferson County Board of Education is having plans prepared by D. O. Whildin, Title Guarantee Bldg., Birmingham; for school building at Chalkville to replace burned structure; 4 rooms.

Fla., Coconut Grove. — Dade County Board of Public Instruction, R. E. Hall, Supt., Miami, receives bids until Sept. 3 to erect addition to school; plans and specifications at office of H. Hastings Mundy, Archt., New Tatum Bldg., Miami. (Previously noted.)

Ky., Louisville. — War Department, Washington, will erect motor school for Field Artillery Replacement camp at Camp Zachary Taylor. (See Government and State.)

W. Va., Huntington. — Chesapeake & Ohio Ry., F. I. Cabell, Ch. Engr., Richmond, Va., will erect addition to hospital. (See Hospitals.)

### SCHOOLS

Ark., Texarkana. — School Board will erect school to replace structure lately noted damaged by fire.

Fla., Groveland. — Board of Public Instruction of Lake County receives bids at office Wm. T. Kennedy, Supt., Tavares, Fla., until Sept. 16 to erect 2-story school buildings; plans and specifications at office Superintendent at Umatilla, Fla., and at Bank of Groveland. (Previously noted.)

La., Gibsland. — School Board will erect annex to high school; 2 stories; brick; classrooms on first floor; study hall, domestic science department and 2 laboratory classrooms on second; steam heat.

S. C., Clinton. — State Board of Charities and Corrections, Columbia, Dr. D. D. Wallace, representative, will erect training school for feeble-minded at Dover, 2 mi. east of Clinton.

Tenn., Jackson. — Union University, H. E. Watters, Pres., has plans by R. A. Heavener, Jackson, for repairing dormitory to replace burned structure; 3 stories; brick; cost \$15,000.

Tex., Austin. — University of Texas, Dr. R. E. Vinson, Pres., is considering enlargement of radio school and automobile school; cost \$800,000.

Tex., Dallas. — Baylor Medical College is reported to erect 6-story additional building; brick; cost \$75,000.

Tex., Lubbock. — School Board has plans by W. E. Taylor, Lubbock, for school at Ropes; 2 stories and basement; brick; pitch and gravel roof; yellow pine and concrete floors; cost \$12,500.

Va., Ivy. — Archdeacon F. W. Neve and others are interested in erection of school as memorial to Meriwether Lewis; plan to erect \$75,000 structure.

Va., Lee Hall. — War Dept., Washington, will complete balloon school; erect 60 buildings; cost \$203,000. (See Government and State.)

Va., Richmond. — School Board will erect addition to and repair school at 11th and Bainbridge Sts.; cost \$2000.

Va., Rustburg. — Board of Education has plans by Heard, Cardwell & Chesterman, Peoples' Bank Bldg., Lynchburg, Va., for school; 2 stories; 60x90 ft.; brick; ordinary construction; slag roof; wood joist floor construction; cost \$29,000; steam heat, \$3000. Address architects.

W. Va., Marlinton. — Board of Education of Edray Dist., G. W. Sharp, Secy., will erect 1-room school on Bucks Run; also repair Marlinton Graded School; bids opened Aug. 27; plans and specifications at office E. H. Williams, First National Bank Bldg., Marlinton.

### STORES

Ark., Marianna. — Griffin-Newbern Co. will probably erect building to replace structure

lately noted damaged by fire at loss of \$40,000.

Ark., Marianna. — Mixon-McClintock Co. will probably rebuild structure lately noted damaged by fire at loss of \$35,000.

Ark., Marianna. — Nathan Furniture Co. will probably rebuild store building to replace structure lately noted damaged by fire at loss of \$49,000.

Fla., Jacksonville. — S. B. Hubbard Hardware Co. will probably erect store building to replace structure lately noted damaged at loss of \$75,000.

Ga., Brunswick. — Labor Unions, J. S. Sharlet, Business Mgr., will erect building; contain stores, etc. (See Association and Fraternal.)

Ky., Louisville. — F. W. Woolworth Co. will alter and enlarge store building at 4th and Green Sts.; reported cost about \$16,000; R. A. McDowell, Atty. for owner of building, Lincoln Bldg., Louisville.

Ky., Louisville. — Bankers' Realty Co. will repair building at 4th and Market Sts.; cost \$6000.

La., Shreveport. — Long-Bell Lumber Co. will erect frame business building; cost \$5000.

Miss., Clarksdale. — Sommers & Landry will erect 2-story business building to replace structure lately noted damaged by fire; 7 storerooms on first floor; about 25 offices on second floor; brick; cost \$30,000.

Mo., St. Louis. — Abraham Fur Co. leased 4-story and basement building at 211 N. Main St. and is reported to remodel.

Tex., Athens. — Mayfield Wholesale Grocery Co. will probably erect building to replace structure lately noted damaged by fire at loss of \$10,000.

Tex., Beaumont. — Goodhue Estate will probably rebuild structure lately noted damaged by fire at loss of \$10,000.

Tex., Dallas. — A. Furche Estate will probably erect store buildings lately noted damaged by fire.

Tex., Dallas. — Mrs. W. C. Connolly will probably rebuild store building to replace structure lately noted damaged by fire.

Tex., Fort Worth. — John Donahue will expend \$2500 to repair store building.

Tex., Fort Worth. — Mrs. D. Waggoner will expend \$4000 to repair brick building, 708 Houston St.

Tex., Houston. — V. Mandola will erect business building; frame and stucco; cost \$2500.

Tex., San Antonio. — W. F. Schutz will erect business building; brick; cost \$7500.

Va., Berkley Sta., Norfolk. — A. Kruger, Campostella, will erect addition to building, 121 Main St., and convert into store.

Va., Norfolk. — Mayes & Jenkins will probably erect store building to replace structure lately noted damaged by fire at loss of \$30,000.

W. Va., Charleston. — O. J. Morrison Department Store Co. is having plans prepared by L. J. Dean, Huntington, W. Va., for

store; 65x160 ft. with 25x23-ft. wing; 6 stories and basement; reinforced concrete; stone or terra-cotta front; cost \$150,000.

W. Va., Princeton. — Princeton Wholesale Grocery Co. will erect addition to building; brick.

### THEATERS

Mo., St. Louis. — Chas. A. Pitman has plans by F. W. Folk, 1518 Cora Place, St. Louis, to erect moving-picture theater; 50x125 ft.; brick; composition roof; cost \$10,000; heating, \$2000; lighting, \$1000; will sublet contracts; construction begun. Address architect. (Lately noted.)

Mo., St. Louis. — Montgomery Theater will expend \$2000 to alter theater.

Tex., Waco. — Wm. F. Sonneman leased building at 419 Austin St. and will remodel for picture-show theater; install ventilating and cooling systems.

Va., Newport News. — I. Ornof is having plans prepared by W. H. Simpson, Board of Trade Bldg., Norfolk, for vaudeville and moving-picture theater; 1 story; 50x100 ft.; frame; cost \$25,000.

### WAREHOUSES

Ga., Jesup. — Company is being organized by A. E. Knight and others to erect potato warehouse.

La., Shreveport. — Chamber of Commerce is promoting erection of 2 sweet-potato curing houses; cost about \$7000.

Ky., Louisville. — Belknap Hardware & Manufacturing Co. will erect warehouse to replace structure lately noted damaged by fire; brick; cost \$4000.

La., Lake Charles. — E. W. Channell will rebuild fence warehouse lately damaged by storm; 36x180 ft.

Mo., Independence. — National Supply Co. is having plans prepared by Mills, Rhines, Bellman & Nordhoff, 1234 Ohio Bldg., Toledo, Ohio, for warehouse and office building; former 1 story; 72x140 ft.; latter 50x100 ft.; reinforced concrete; cost \$75,000.

Mo., St. Louis. — Northwest Consolidated Milling Co. has plans by W. P. McMahan, Wainwright Bldg., St. Louis, for storage and office building; 2 stories; 100x100 ft.; brick cost \$15,000.

S. C., Clio. — Tobacco Warehouse Co. inceptd. with \$15,000 capital by H. C. Herring, L. D. Bunky, John McInnis and H. L. Galloway, all of Clio.

S. C., Florence. — Howard Cannon will probably erect tobacco warehouse to replace building lately noted damaged by fire at loss of \$20,000.

S. C., Summerville. — Summerville Tobacco Warehouse Co. inceptd. with \$20,000 capital by L. A. Walker, Legare Walker, T. M. Duncan and others.

Va., Richmond. — Terminal Storage Corp. inceptd. with \$100,000 capital by W. J. Parrish, Pres.; Hugh L. Cooke, Secy.; M. Sharove and L. C. Hazelgrove.

## BUILDING CONTRACTS AWARDED

### APARTMENT-HOUSES

D. C., Washington. — Thomas Jefferson Hotel Co., H. R. Simmons, Pres., let contract to Geo. A. Fuller Co., Munsey Bldg., Washington, to erect apartment hotel; 50x120 ft.; 12 stories; fireproof; steel and concrete; slag roof; concrete floor slabs; vacuum steam heat; electric lighting; 3 electric elevators; cost \$485,000; Milburn, Heister & Co., Archts., 710 14th St. N. W., Washington; contractor taking sub-bids. (See Hotels.)

S. C., Columbia. — K. G. Baldwin let contract to A. Lotain, Columbia, to remodel building for apartment-house; frame; tin roof; electric lights; cost \$2000.

Tex., Dallas. — G. O. Wallace let contract to J. M. Jones, Dallas, to erect apartment-house; 2 stories; 10 rooms; brick; cost \$10,000.

Tex., Fort Worth. — L. L. Burton, 301 Fort Worth Club Bldg., let contract to G. S. Crumack, Fort Worth, to erect apartment-house; 4 suites; 54x90 ft.; tile, brick and reinforced concrete; gravel roof; hardwood floors; cost \$24,000. (Lately noted.)

Tex., Houston. — Mrs. L. C. Ayars let contract to M. Wagenknecht to erect apartment-house; 10 rooms; frame; cost \$5500.

Tex., Houston. — W. A. Wilson Co. let contract to R. A. Reynolds, Houston, to erect apartment-house; 11 rooms; frame; cost \$4657.

Va., Norfolk. — E. K. Wilson has plans by

and let contract to Philip B. Moser, Law Bldg., Norfolk, to erect bachelor apartments in Mowbray Arch; let contract for plumbing and heating to Wilson & Co., 710 Bousch St.; electric work, Wm. A. Burkard Co., 20 Commerce St.; roofing, Spann & Hill, 715 Granby St.; painting, H. C. Harding, 111 31st St.; all of Norfolk; 3 stories; 25x45 ft.; cost \$60,000.

### ASSOCIATION AND FRATERNAL

Va., Norfolk. — Norfolk Lodge No. 39, Loyal Order of Moose, let contract on percentage basis to G. F. Cox, 41 Chamberlaine Bldg., Norfolk, to erect fraternal building; 28x120 ft.; 3 stories; brick; stone trim; slate and composition roof; wood and tile floors; cost about \$20,000; steam heat, about \$3500; electric and gas lighting; completion by Jan. 1; W. Newton Diehl, Archt., Norfolk.

Va., Petersburg. — Knights of Columbus let contract to Harrison Construction Co., Petersburg, to alter and repair present structures at Camp Lee; plans are being prepared for 3 additional buildings, one at Remount Station, one at Zero St. and one near Prince George Courthouse.

### BANK AND OFFICE

Ky., Independence. — Bank of Independence let contract for plumbing for bank building to J. Howk, 408 Madison Ave.; tile roof to R. L. Brown, 2033 Pearl St.; painting to

Henry Schroeder, 1234 Madison St.; all of Covington, Ky.; plans by C. C. and E. A. Weber, Miller Bldg., Cincinnati, Ohio, call for 2 stories; 40x50 ft.; brick, stone and concrete; concrete floors; steam heat; cost \$50,000. (Lately noted.)

Mo., St. Louis. — Monsanto Chemical Co. let contract to H. J. Bright, Title Guaranty Bldg., Kansas City, to erect warehouse and office building; cost \$100,000; T. C. Link and W. C. Trueblood, Associate Archts., Carson Bldg., Kansas City. (See Warehouses.)

Okla., Tulsa. — MacMahon Company, 123 Oak St., Kansas City, Mo., has contract at about \$90,000 for plumbing, heating and ventilating in First National Bank Bldg. (Previously noted.)

### CHURCHES

Ala., Birmingham. — Payne Chapel A. M. E. Church let contract to J. B. Carter, 114 E. 17th St., Birmingham, to erect building; 6x70 ft.; brick and wood; paper on the walls; wood floors; furnace and fan system of heat; electric lighting; cost \$9000; W. A. Rayfield & Co., Archts., Birmingham. Address Mr. Carter. (Lately noted.)

S. C., Greenville. — St. Mary's Catholic Church let contract to Charles Klockner, Greenville, to erect 2-story addition to building; cost \$4000.

Tex., Whitesboro. — Baptist Church let contract to Mr. Harris, Nevada, Tex., to erect building; cost \$12,500.

### COURTHOUSES

Ark., Harrisburg. — Poinsett County Commrs. let contract to M. Selligman, Harrisburg, to erect courthouse; cost \$20,000. (Previously noted.)

### DWELLINGS

Ark., Little Rock. — R. R. Sawyer, 1917 Harrison St., let contract to erect 5 cottages; 5 and 6 rooms; frame and brick; cobblestone foundations; composition shingle roofing; hardwood and pine floors. (See Machinery Wanted—Saw Higs; Contractors' Equipment.)

La., Monroe. — Mrs. Johnson let contract to R. Casidy, Monroe, to erect residence; 1½ stories; frame; brick foundation; asphalt shingle roof; wood and cement floors; hot-water heat; cost \$6000; J. W. Smith, Archt., Monroe.

La., Monroe. — Thomas Sullivan let contract to Fauntleroy & Ellis to erect 3 cottages; cost about \$13,000.

La., New Orleans. — A. Bertani let contract to F. A. Kellen, New Orleans, to erect residence; cost \$2750.

La., New Orleans. — J. H. Wheeler let contract to A. S. Smith, New Orleans, to erect dwelling; cost \$4200.

Md., Baltimore. — Baltimore Card & Foundry Co., Curtis Bay, subsidiary of Standard Steel Car Co., Pittsburgh, Pa., will erect 500 dwellings for employees of fabricating steel plant; also hotel to accommodate 8 men, construction permitting erection of additional wings later; plans also include recreation center, lockers, restrooms, etc. Mellon-Stuart Co., 2112 Olive Bldg., Pittsburgh, has contract for hotel and initial operation of 60 2½-story frame and stone dwellings equipped with steam heat and electric lights, and work on these structures is progressing. (Lately noted.)

Md., Brunswick. — Mrs. C. E. Signafosse has plans by and let contract to H. B. Funk, Brunswick, to rebuild 1 story of residence lately noted damaged by fire; wood; 3½-slate roof; wood floors; cost \$1500; heating, \$500; lighting, \$100. Address R. E. Signafosse, Brunswick. (See Machinery Wanted—Heating Plant.)

Mo., Joplin. — Albert Wolfe let contract to George Ramake, 2d and Connor Ave., Joplin, to erect residence and garage; 45x30 ft.; cost \$3300.

Mo., Kansas City. — Isla L. Derr let contract to J. C. Nichols, 911 Commerce Bldg., Kansas City, for residence; 2 stories and basement; 39x36 ft.; stucco; shingle roof; cost \$3500; H. D. Belcher, Archt., Reliance Bldg., Kansas City. (Previously noted.)

Mo., St. Louis. — A. Fick let contract to Richard Mederache, 4430 Arsenal St., St. Louis, for bungalow; 2 stories; cost \$2000.

N. C., Charlotte. — C's Company let contract to J. H. Deal, Charlotte, to erect 2 dwellings at 800 and 904 E. Boulevard; cost \$4500 and \$4600, respectively; W. H. Peeples, Archt., Charlotte.

N. C., Charlotte. — J. D. Martin let contract to erect 5-room dwelling at 707 S. Caldwell

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to replace structure previously noted damaged by fire.

X. C. Charlotte.—Lewis Caldwell let contract to erect dwelling at 807 S. Caldwell St. to replace structure previously noted damaged by fire.

X. C. Fayetteville.—L. Gentry, Fayetteville, has contract to erect buildings at Camp Bragg for housing construction forces, material, etc.

Oklahoma City.—Mrs. R. Swettys let contract to W. Goulding to erect dwelling; frame; cost \$3500.

Tex., Beaumont.—E. L. Patton let contract to Butt Home Builders, Beaumont, to erect dwelling; 5 rooms; cost \$2900.

Tex., Beaumont.—P. H. Stevens let contract to Interstate Realty Co., Beaumont, to erect two 5-room dwellings; cost \$2800 each.

Tex., Dallas.—N. Goldstein let contract to U. M. Boyd to erect dwelling; 6 rooms; brick veneer; cost \$5500.

Tex., Dallas.—H. J. Plotko let contract to A. B. Eckert, Dallas, to erect residence; 7 rooms; frame; cost \$3000.

Tex., Fort Worth.—R. E. Robins let contract to W. Goulding to erect residence; frame; cost \$3000.

Tex., Houston.—Mrs. A. Thom let contract to J. M. Sims to erect residence; 5 rooms; cost \$2300.

Tex., Houston.—Purdy-Gunman Lumber Co. let contract to J. Crews to erect two 2-story frame dwellings; cost \$2650 each.

Tex., Houston.—S. Bettus let contract to J. D. Coombs to erect 4-room addition; cost \$1500.

Tex., Houston.—Wilson Company let contract to T. Howard to erect residence; 6 rooms; frame; cost \$3300. (Lately noted.)

Va., Danville.—H. O. Eanes let contract to Flora & Weber, Arcade Bldg., Danville, to erect residence; 2 stories; 36x50 ft.; frame; slate roof; rift pine floors; cost \$600; hot-air heat; \$900; electric lights, \$80; Brown Electric Co., Danville, has contract for electric work. Address contractors.

Va., Portsmouth.—Parker & Mulvey, Inc., 23 High St., will rebuild 4 dwellings reported burned; 2 stories; frame; metal roof; electric lights; cost \$2300 to \$2500 each; S. B. Hutchins, Contr., Portsmouth.

Va., Seven Pines.—Bureau of Industrial Housing, Department of Labor, Washington, let contract to Owen, Ames Kimball Co., Grand Rapids, Mich., to erect 100 bungalows. (See Government and State.)

## GOVERNMENT AND STATE

D. C., Washington.—Dormitories, etc.—United States Housing Corporation let contract to Richardson & Burgess, Inc., 616 Colorado Bldg., Washington, to erect dormitories, etc., at 17th and D Sts. S. E. (block 1102 and 1114) for housing navy-yard employees; 27x36.8 ft.; frame; composition roof; wood floors; cost \$125,000; heating plant, \$45,000; electric lighting, \$7500; Jas. A. Wetmore, Supervising Archt., Treasury Department, Washington. (Lately noted to erect 14 dormitories, mess hall and kitchen.)

Fla., Vero.—Postoffice and Store.—Louis Harris let contract to J. H. Baker, Vero, to erect proposed postoffice and store building; 60x60 ft.; stucco; 2 stores.

Ga., Atlanta.—Camp Additions.—War Dept., Washington, let contract to Southern Ferro-Concrete Co., Atlanta, to erect 200 additional barracks at Camp Gordon for officers' training school; accommodate 6000 men; cost \$2,000,000; Maj. W. W. Wade, Camp Constructing Quartermaster. (Lately noted.)

Va., Chincoteague.—Retaining Wall.—Bureau of Lighthouses let contract to E. T. Meurs, Chincoteague, to construct retaining wall; creosoted piles; concrete wall; plans prepared in office Supt. of Lighthouses, Baltimore. Address contractor. (Lately noted to construct retaining wall and improve storehouse.)

Va., Norfolk.—Bureau of Yards and Docks, Navy Department, Washington, let contract at \$65,288 to Newport Contracting & Engineering Co., Newport News, Va., to erect 4 dispensary buildings at naval training station at St. Helena. (Lately noted.)

Va., Norfolk.—Barracks.—Bureau of Industrial Housing, Department of Labor, Washington, let contract to Wise Granite Construction Co., American National Bank Bldg., Richmond, to construct temporary barracks for workmen.

Va., Seven Pines.—Bungalows.—Bureau of Industrial Housing, Department of Labor, Washington, let contract to Owen, Ames

Kimball Co., Grand Rapids, Mich., to erect 100 bungalows; Alladin type. (Lately noted.)

Va., St. Juliens Creek.—Magazines and Shellhouses.—Bureau of Yards and Docks, Navy Department, Washington, let contract at \$264,192 to Griffiths Concrete & Construction Co., Pittsburgh, Pa., to construct 3 magazines and 2 shellhouses. (Lately noted.)

## HOSPITALS, SANITARIUMS, ETC.

Va., Roanoke.—City let contract to L. C. Rhodes, Roanoke, to erect nurses' home at City Hospital; 17 rooms; brick-cased; hot-water heat; hardwood finish; electric lights; cost \$16,000; H. M. Miller, Archt., 3½ Campbell Ave., Roanoke. (Previously noted.)

Va., Norfolk.—Board of Control let contract at \$31,840 to C. W. Beard, Norfolk, to erect 3 buildings for contagious hospital on Rugby St.; Bishopric board and stucco and frame; neponset shingle roof; wood and cement floors; cost \$24,790; Wickham C. Taylor, Archt., Citizens' Bank Bldg., Norfolk. (Lately noted.)

Va., Norfolk.—Bureau of Yards and Docks, Navy Department, Washington, let contract at \$85,288 to Newport Contracting & Engineering Co., Newport News, Va., to erect 4 dispensary buildings at naval training station at St. Helena. (See Government and State.)

## HOTELS

D. C., Washington.—Thomas Jefferson Hotel Co., H. B. Simmons, Prest., let contract to Geo. A. Fuller Co., Munsey Bldg., Washington, to erect apartment hotel at 14th and I Sts. N. W.; 50x120 ft.; 12 stories; steel and concrete; fireproof; slag roof; concrete slab floors; vacuum steam heat; electric lighting; 3 electric elevators; cost \$485,000; Milburn, Heister & Co., Archts., 710 14th St. N. W., Washington; contractor taking sub-bids.

Md., Baltimore.—Baltimore Car & Foundry Co., Curtis Bay, subsidiary of Standard Steel Car Co., Pittsburgh, Pa., let contract to Mellon-Stuart Co., 2112 Olive Bldg., Pittsburgh, to erect hotel to accommodate 60 men. (See Dwellings.)

## MISCELLANEOUS

Mo., Kansas City.—Hoghouse Unit.—Kansas City Stock Yard Co. let contract to Fogel Construction Co., 515 Reliance Bldg., Kansas City, to construct hoghouse unit; 3 stories; 73x270 ft.; S. M. Bate, Engr., Live Stock Exchange Bldg., Kansas City.

Mo., Joplin.—Undertaking Establishment.—Frank Sievers Undertaking Co. let contract to George W. Mills, 4th and Wall Sts., Joplin, to remodel undertaking establishment; 2 stories; cost \$3000.

## RAILWAY STATIONS, SHEDS, ETC.

Tex., Dallas.—Texas Electric Railway Co. let contract to R. C. Cox, Dallas, to erect addition to 4-story brick building; cost \$3000.

Tex., Houston.—American Railway Express Co. let contract to I. J. Shapley to erect shed with concrete driveway; cost \$4000.

## SCHOOLS

Fla., Astor.—Lake County Board of Public Instruction, Wm. T. Kennedy, Secy., Umatilla, Fla., let contract to C. Z. Osborne, Umatilla, to erect school; 2 rooms and second-story auditorium; frame; wood floors; cost \$2600; W. H. Carr, Archt., Leesburg, Fla. (Previously noted.)

Fla., Lisbon.—Lake County Board of Public Instruction, Wm. T. Kennedy, Secy., Umatilla, Fla., let contract to C. Z. Osborne, Umatilla, to erect school building; 2 rooms and second-story auditorium; frame; wood floors; cost \$2600; W. H. Carr, Archt., Leesburg, Fla. (Previously noted.)

Miss., Jackson.—Belhaven College, W. H. Frazier, Prest., let contract to J. D. Varley to erect annex; accommodate 44 girls; cost \$25,000.

Mo., Whiteoak.—School Board Dist. No. 72 let contract to Hall Brothers, Kennett, Mo., to erect school building; 48x46 ft.; stucco; shingle roof; pine floors; cost \$28,000; heating plant not purchased. (Lately noted.)

N. C., Wilmington.—County Board of Education, T. E. Cooper, Chrmn., let contract to R. H. Brady, Wilmington, to erect addition to high-school building; 3 stories; 60x110 ft.; brick and ordinary construction; portable roofing; double floor, with gum for finishing; electric lighting; cost \$32,000; steam heat,

about \$6000; Henry E. Bonitz, Archt., Wilmington; H. E. Longley, Wilmington, has contract for heating. (Lately noted.)

Oklahoma City.—Board of Education let contract to Fred Crites, 2136 Bellevue St., Kansas City, Mo., for grade school; 1 story and basement; 112x172 ft.; cost \$65,000; also let contract to Mr. Crites to erect 4-room addition to school; 2 stories and basement; 28x34 ft.; cost \$35,000; Smith, Ren & Lovitt, Archts., Finance Bldg., Kansas City, Mo. (Lately noted.)

Tex., Blythe.—School Board let contract to S. Dane, Floydada, Tex., to erect school; 2 stories and basement; brick; pitch and gravel roof; yellow pine and concrete floors; stoves; cost \$11,000; W. E. Taylor, Archt., Lubbock, Tex. (Previously noted.)

Tex., Shallowater.—School Board let contract to S. Dane, Floydada, Tex., to erect school; 2 stories and basement; brick; pitch and gravel roof; yellow pine and concrete floors; stoves; cost \$11,000; W. E. Taylor, Archt., Lubbock, Tex. (Lately noted.)

W. Va., Putney.—Board of Education of Mahlen, Dist., J. E. White, Prest. Board of Education; let contract to erect school building; about 40x80 ft.; frame; paper roof; \$700 heating plant; Geo. M. Jones, Archt., Mahlen, W. Va. (Previously noted.)

## STORES

Fla., Miami.—A. R. Smart, Oil City, Pa., let contract to P. B. Bechard to remodel building at 11th and Court Sts.; 88x100 ft.; stucco; tin roof; concrete floors; A. E. Lewis, Archt., Miami. (Lately noted.)

Fla., Vero.—Louis Harris let contract to J. H. Baker, Vero, to erect proposed post-office and store building. (See Government and State.)

Md., Baltimore.—Leopold Sells, Equitable Bldg., let contract to Max Covalerchek, 1609 Eutaw Place, Baltimore, to erect store building at 138 W. Fayette St.; 23x69 ft.; ordinary masonry construction; slag roof; wood floors; gas heat; electric lighting; cost about \$8000; Blanke & Zink, Archts., 835-37 Equitable Bldg., Baltimore. Address contractor. (Lately noted.)

Oklahoma City.—Tucker Furniture Co. let contract to C. E. Frye, Oklahoma City, to repair building; cost \$7000.

Tenn., Nashville.—Porter Clothing Co., H. J. Porter, Gen. Mgr., Birmingham, Ala., let contract for improvements to store building at 5th and Church Sts.; remodel show windows, refurnish, etc. (Lately noted.)

Tex., Dallas.—E. J. Frye and C. Cobb let contract to C. C. Gatman to erect addition to brick building, 1001-03 Marilla St.; cost \$2500.

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

### "WANTS"

**Alcohol Machinery.**—Dorsey Land & Lumon machinery for distilling alcohol, etc. ber Co., Texarkana, Ark.—Data and prices from hardwoods.

**Ammonium.**—A. Castaneda, Box 1186, San Antonio, Tex.—Addresses of manufacturers of ammonium. (See Caustic Soda, etc.)

**Ammonia (Anhydrous).**—Rodolfo Huber, Compostela 90-92 Antiguo, Habana, Cuba.—Prices (if possible, American shipment port) on anhydrous ammonia, for ice manufacture; consecutive shipments.

**Ashes (Hardwood).**—Industrial Laboratories, Merchants Bank Bldg., Fort Smith, Ark.—Prices on large quantities hardwood ashes.

**Battery (Electric) Machinery.**—Ajax Electric Specialty Co., 1408 Morgan St., St. Louis, Mo.—Data and prices on special machinery for making flashlight batteries.

**Blower System, etc.**—Greenwood Peanut Co., Jos. Messina, Prest.-Mgr., Greenwood, Fla.—Prices on blower and conveyor system for peanuts and peanut shells.

**Boiler.**—American Butter Co., J. S. Carpenter, Prest., 540 Walnut St., Kansas City, Mo.—Prices on 60 H. P. boiler.

**Boiler (Marine or Locomotive).**—Durham Coal & Iron Co., James Bldg., Chattanooga, Tenn.—Prices on 80 H. P. marine or locomotive-type boiler. (See Engine and Boiler.)

**Boilers.**—Greensboro Machine Co., Greensboro, N. C.—3 second-hand, 25 to 35 H. P. skid boilers; two 40 H. P. return tube

Tex., Houston.—Dr. O. F. Gambati let contract to J. Lochridge to erect addition to dwelling; cost \$5000. (Lately noted.)

Tex., Houston.—Martin Dry Cleaning Co. let contract to W. A. Lang to erect business building; brick; cost \$4000. (Lately noted.)

Va., Lynchburg.—Mrs. E. M. Wall let contract to W. T. Jones & Co., Lynchburg, to erect store building; also let contract to W. L. Manley, 1208 Early St., Lynchburg, for roofing; 2 stories; 67x132 ft.; cost \$50,000.

Va., Norfolk.—Hofheimer Brothers let contract to W. J. Atkinson, Arcade Bldg., Norfolk, to erect addition to store; also let contract to Graham & Fairer, 223 Bank St., Norfolk, for heating and plumbing; 1 story; 20x50 ft.; cost \$2500.

## THEATERS

Fla., Jacksonville.—S. A. Lynch Enterprises, Inc., let contract to C. E. Hillyer, Jacksonville, to erect theater at Ocean and Forsythe Sts.; 95x105 ft.; brick and reinforced concrete; Barrett specification roofing; concrete floors; gas radiators; 2 freight elevators; cost \$125,000; electric lighting, \$5500; construction begun; R. A. Benjamin, Archt., Jacksonville. (Lately noted.)

## WAREHOUSES

Mo., St. Louis.—David N. O'Neil will erect building for storage of automobile trucks; 1 story; brick; roof of truss construction; heating plant; gasoline tank; construction under supervision of Sol Abrahams & Sons Construction Co.

Mo., St. Louis.—Monsanto Chemical Co. let contract (including plumbing and wiring) to H. J. Bright, Title Guaranty Bldg., St. Louis, to erect warehouse and office building; 1 story; 75x173 ft.; cost \$100,000; T. C. Link and W. E. Trueblood, Associate Archts., Carlton Bldg., St. Louis; Brennecke & Fay, Structural Engrs., 1204 Fullerton Bldg., St. Louis. (Lately noted.)

N. C., Charlotte.—Barnhart Manufacturing Co. let contract to R. N. Hunter, Charlotte, to erect warehouse; 60 ft. long; 1 and 2 stories; sprinkler system; cost \$5000.

Tex., Dallas.—Howard Hyde & Leather Co. let contract to Moore Construction Co., Dallas, to erect 1-story addition to warehouse; brick; cost \$3500. (Previously noted.)

Va., Graham.—Eclipse Milling Co. has plans by and let contract to Saml. R. Ashworth, Graham, to erect storage warehouse; 100x60 ft.; gray pressed brick; slate asphalt roof; concrete and wood floors; electric elevators; cost \$5000; electric lighting, \$50; also let contract to Mr. Ashworth to erect garage 20x24 ft.; concrete floor; wood construction; metal siding; fireproof roof; cost \$300. (Lately noted.)

tubular boilers; 150 H. P. tubular boiler; state condition and price.

**Boilers.**—Atlantic Ice & Coal Corporation, Atlanta, Ga.—Prices, f. o. b. cars, shipping point, on second-hand boilers; one 350 to 400 H. P.; two 225 to 250 H. P.; one 200 to 225 H. P.; Heine or B. & W. wrought header type, capacity not less than 150 lbs. working pressure. State floor space and height required for installation, also size length and number of tubes.

**Boiler.**—Henry Loeb & Co., Memphis, Tenn.—Prices on second-hand boiler; internal fire; locomotive type or Scotch marine, 100 to 150 H. P.; stand test of 110 minimum pressure.

**Boilers.**—Richard Carter Co., A. R. Carter, Prest.-Mgr., Hammond, La.—Prices on small high-pressure boilers for 1-ton steam trucks.

**Boilers (Water Tube).**—Box 577, Lake Charles, La.—Prices on two 200 H. P. water tube boilers. (See Pumping Plant.)

**Boilers (Water Tube).**—Ocala Mfg. Co., Box 576, Ocala, Fla.—Prices on 1 or 2 second-hand water tube boilers, 250 to 300 H. P.; for burning refuse, sawdust and shavings; prefer Babcock & Wilcox, Stirling or Heine makes.

**Bottling Machinery.**—Rodolfo Huber, Compostela 90-92 Antiguo, Habana, Cuba.—Prices on machinery to manufacture carbonate drinks; daily capacity 1000 cases of 24 bottles each, to be increased to 3000 cases daily; new or second-hand guaranteed machinery.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



**Bridge.**—Port Comms., John R. Loomis, Purchasing Officer, 833 Canal St., New Orleans, La.—Bids until Sept. 6 (change of date) to furnish and erect, on foundations furnished, 4 double track railway and highway Strauss trunnion bascule bridges at sites of railway crossings, Inner Harbor Navigation Canal; specifications, etc., at offices Geo. W. Goethals & Co., Engrs., 40 Wall St., New York, and of Port Comms., New Orleans.

**Castings (Steel).**—F. A. Herwehe, 240 Chapel St., Hampton, Va.—Addresses of manufacturers of steel castings, in Baltimore preferred.

**Caustic Soda, etc.**—A. Castaneda, Box 1186, San Antonio, Tex.—Addresses of manufacturers of caustic soda, potassium carbonate and ammonium.

**Chairs, etc.**—Floyd Hill Furniture Co., Leesville, N. C.—Addresses of manufacturers of chairs and other low-priced furniture, knock-down, for shipment to Southern manufacture, for finishing, painting and marketing.

**Clock (Watchman's).**—Yarborough Company, Powhatan, La.—Prices on second-hand watchman clock; approved by underwriters; 4 or 5 stations enough.

**Conveyors.**—See Blower System, etc.

**Compressor (Air).**—Pulaski Foundry & Mfg. Corp., Pulaski, Va.—Prices on single or double-stage, motor or belt driven air compressor to furnish 300 to 500 cu. ft. free air per minute at 100 lbs. pressure; state price, length of service, name of manufacturer, delivery promise and where inspection can be made.

**Contractors' Equipment.**—R. R. Sawyer, 1917 Harrison St., Little Rock, Ark.—Prices on contractors' equipment, etc. (See Saw Rigs.)

**Cotton Chopper.**—Byron Nichols, Waterloo, S. C.—Correspondence, view to placing order for manufacture of cotton chopper, weight about 90 lbs.

**Dam Construction.**—Board of Comms., J. M. Haynes, Secy., Lawton, Okla.—Bids until Sept. 3 to increase height of dam 10 ft. at Lake Law-ton-ka; plans and specifications on file with Secy.

**Drainage.**—Clarendon County Drainage Dist. No. 3, Courtney Campbell, Secy., Greeleyville, S. C.—Bids Sept. 14 at office Mallard Lumber Co. to construct Foreston and Greeleyville drainage canals; 15 mi. canal, and 173,000 yds. excavation; completion within 18 months; plans and specifications for \$2.

**Drainage.**—McLean County Drainage Comms., S. B. Robertson, Secy., Calhoun, Ky.—Bids until Sept. 5 to construct ditch and arms or laterals (established by County Court, on action of W. A. Thomas and others' petition for drainage Dist.); 209,448.9 cu. yds. earth removal; let as whole, or arms and laterals, and main ditch separately.

**Electrical Equipment.**—Thos. L. Barret, 127 N. Third St., Louisville, Ky.—Prices on 100 K. W. 2300-volt 3-phase 60-cycle generator, preferably belt-connected and operated by kerosene or oil engine; the complete outfit to include generator, panel, exciter, all electrical equipment and engine; or would consider direct-connected equipment with oil or kerosene engine, or steam engine drive with complete boiler equipment. Wire (collect) full details, price, location, etc.; confirm by special delivery letter.

**Engine.**—See Generating Set.

**Engine (Corliss).**—Box 877, Lake Charles, La.—Prices on 400 H. P. Corliss engine. (See Pumping Plant.)

**Engine (Corliss).**—Merchants Light & Power Co., Novinger, Mo.—Prices on 75 H. P. Corliss engine; second-hand.

**Engine (Reversible).**—Farris Coal Co., W. R. Ballan, Prest., Box 2, East Bernstadt, Ky.—Prices on 12 to 18 H. P. reversible engine; to hold 2000 ft. ½-in. wire rope.

**Engine and Boiler.**—Durham Coal & Iron Co., James Bldg., Chattanooga, Tenn.—Prices on 300 H. P., single-cylinder, double-acting, center-crank steam engine, with 20x84-in. fly wheel, and 80 H. P. marine or locomotive-type boiler.

**Engineers.**—Dist. Engrs., 33 Custom-house, Charleston, S. C.—Three junior engineers and six survey men; for duty on proposed channel improvement to 1000 ft. wide and 40 ft. deep; state qualifications, experience, age, draft classification, etc.

**Furniture.**—See School Furniture and Supplies.

**Furniture.**—See Chairs, etc.

**Lock Gates and Parts.**—Port Comms., John R. Loomis, Purchasing Officer, 833 Canal St., New Orleans, La.—Bids until Sept. 6 (change of date) to furnish and erect, on foundations furnished, lock gates and fixed parts for ship lock under construction at entrance to Inner Harbor; specifications, etc., at office Geo. W. Goethals & Co., 40 Wall St., New York, and of Port Comms., New Orleans.

**Generating Set (Electric).**—Centertown Coal Co., Centertown, Ky.—Prices on generator set, 250 K. W., 250 volts, D. C., direct connected to engine.

**Hardware.**—Jayme Da Costa, 16 Rua Dos Correios, Lisbon, Portugal.—Catalogs and prices on tools and hardware; view to representation. (See Machinery, etc.)

**Heating System.**—Bureau of Yards and Docks, Navy Department, C. W. Parks, Chief, Washington, D. C.—Bids on heating system in Marine Corps Hospital at Quantico, Va.; cost \$45,000.

**Heating Plant (Hot-water and Hot-air).**—R. E. Sigafosse, Brunswick, Md.—Prices on both hot-water and hot-air heating plants for residence.

**Ice Machinery.**—American Butter Co., J. S. Carpenter, Prest., 540 Walnut St., Kansas City, Mo.—Prices on ice machine, 25 tons capacity.

**Ice Machinery.**—A-4, care of Manufacturers Record, Baltimore, Md.—Prices on 40 to 50-ton ice-making apparatus to arrange for raw water and electric drive; standard make only.

**Levee.**—Directors Crawford Levee Dist., W. G. Furry, Secy., Van Buren, Ark.—Bids until August 30 to build loop to levee containing 47,600 cu. yds. embankment; Winters & Dove, Engrs., Fort Smith, Ark.

**Locomotive.**—Chas. A. McLean, 412 Citizens' Bank Bldg., Norfolk, Va.—Dealers' prices on 36-in. gauge locomotive with tender; not saddle tank; 16 to 18 tons.

**Locomotive.**—Georgia Kaolin Co., Macon, Ga.—Prices on small second-hand locomotive, 14 to 18 tons; give full details.

**Locomotive.**—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Prices on 35 to 40-ton saddle-tank locomotive; standard gauge.

**Lumber.**—Navy Department, Bureau Supplies and Accounts, No. 629, Washington, D. C.—Bids on 676 straight hickory butts, Schedule 1911, various deliveries; 26,000 ft. hickory (for handles, capstans, etc.), Schedule 1911, delivery Mare Island; 39,000 ft. dry white hickory, Schedule 1911, delivery Washington; white domestic oak, Schedule 1913, delivery Philadelphia and Washington; 200 spruce poles, Schedule 1911, delivery Brooklyn, N. Y.; New England or Southern spruce, Schedule 1912, various deliveries; schedules obtainable on application to Navy Purchasing Office, in or nearest each navy-yard.

**Machinery, etc.**—Jayme Da Costa, 16 Rua Dos Correios, Lisbon, Portugal.—Catalogs and prices on machinery, metals, tools and hardware; view to representation.

**Machine Tools.**—Navy Dept., Bureau Supplies and Accounts, No. 630, Washington, D. C.—Bids to furnish: 3 radial drills; 6 bench grinders; 4 tool grinders; grinding machines; 4 boring machines; 3 hacksaw machines; 3 milling machines; 2 screw machines; 6 engine lathes; 5 turret lathes; 24 turning lathes; 16 variable speed lathes; 6 arbor presses; 4 crank slotters; schedule 1927, delivery Washington; also automatic lathe; 5 turret lathes and 2 profiling machines; schedule 1928, delivery Newport, R. I.

**Machine Tools.**—Navy Department, Bureau Supplies and Accounts, No. 628, Washington, D. C.—Bids on 3 grinders (plain, tool and cutter); 8-ft. lathe; thread bolt machine; 4 vertical boring machines; 2 horizontal boring and drilling machines; 3 sensitive, vertical boring machines; core-box machine; 15 milling machines (double arm, universal and plain); single spindle shaping machine; 6 slotter machines (4, 8 and 12-in.); 3 tool grinding machines; 6 drill presses (22 and 28 in.); 12 drill presses (2 and 3 spindle); 3 radial drill presses (half universal); 3 trimming presses; all Schedule 1899; also 10 automatic screw machines; 2 planers (48 in. wide by 8 or 12 ft. long); and 9 pillar cranked, brack-gear shapers, Schedule 1901.

**Manufacturers.**—Barles, Rank du 4 Zouaves, Company G. O. G. P., 23 Rue du Temple, Care Charge d' Affaires, Paris, France.—To represent American manufacturers.

**Mechanical Equipment.**—Treasury Department, Jas. A. Wetmore, Acting Supervising Archt., Washington.—Bids until August 30 for repairs to mechanical equipment at Marine Hospital, St. Louis, Mo.; plans at office Mr. Wetmore.

**Mechanical Equipment.**—Treasury Department, Jas. A. Wetmore, Acting Supervising Architect, Washington, D. C.—Bids until Sept. 11 for mechanical equipment (except elevator and lighting fixtures) for U. S. custom-house; specifications with Supt. of Construction, Wilmington, and Mr. Wetmore as above.

**Metal Couplers.**—P. F. Somers, Stony Point, N. C.—Correspondence with manufacturers, view to placing order for making patented check line coupler, larger than ordinary buckle and of similar metal.

**Metals.**—Jayme Da Costa, 16 Rua Dos Correios, Lisbon, Portugal.—Catalogs and prices on metals; view to representation. (See Machinery, etc.)

**Mining Machinery (Coal).**—O. C. Evans, Greenville, Ky.—Prices on complete equipment, shaft mine; electric operation; prefer good second-hand.

**Motors.**—American Butter Co., J. S. Carpenter, Prest., 540 Walnut St., Kansas City, Mo.—Prices on electric motors.

**Motors (Electric).**—Rodolfo Huber, Compostela 90-92 Antiguo, Habana, Cuba.—Prices on electric motor, 200 H. P., 110 volts; new or second-hand guaranteed.

**Paper (Blotting) Machinery.**—P. P. Diez Hermanos, Jerez de la Frontera, Spain.—Catalogs of machinery for manufacture of blotting paper.

**Paving.**—Board of Public Works, Harold Pinder, Clerk, Key West, Fla.—Bids until Sept. 18 for 30,000 sq. yds. surface treatment of asphalt paving cement.

**Paving.**—City of Bristol, Va. and Tenn.—Bids until Sept. 23 at office of Recorder, Bristol, Tenn., and of City Clerk, Bristol, Va., to grade and pave State St.; 20,000 sq. yds. concrete and asphalt paving; plans and specifications on file with Recorder or City Clerk; also bids until Sept. 23 at office Recorder, Bristol, Tenn., for 5000 sq. yds. paving, and of City Clerk, Bristol, Va., for 6000 sq. yds.; A. J. Roller and J. T. Cecil, Joint Committee, Bristol, Va.-Tenn.

**Paving.**—City of Shreveport, La., R. H. Ward, Commr. Accounts and Finance.—Bids to pave Highland Ave. and Kings Highway from Wilkinson to Wesley St.; bids opened August 27.

**Potassium Carbonate.**—A. Castaneda, Box 1186, San Antonio, Tex.—Addresses of manufacturers of potassium carbonate. (See Caustic Soda, etc.)

**Pump (Fire).**—Continental Car Co. of America, Louisville, Ky.—Prices on second-hand fire pump; first-class condition; for 1500 G. P. M.; steam or motor driven; pressure 75 lbs. against head.

**Pump (Brine).**—Chas. A. McLean, 412 Citizens' Bank Bldg., Norfolk, Va.—Dealers' prices on brine pump, about 8x10x12, brass fitted.

**Pumps (Steam).**—Geo. F. Adams, Mgr. Hotel Chamberlin, Fort Monroe, Va.—Prices, with complete description, of 2 duplex steam pumps, for connection with pressure filters, for fresh water supply; maximum discharge pressure 150 lbs., with capacity of 350 G. P. M., with available steam pressure of 90 lbs.

**Pumping Plant.**—Box 877, Lake Charles, La.—Prices on second-hand pumping plant for irrigation; 36-in. centrifugal double suction pump, lift 20 to 25 ft.; 400 H. P. Corliss engine; two 200 H. P. water-tube boilers; complete plant preferred, but solicit description and quotations on single items.

**Road Construction.**—Road Board, Lonoke County Dist. No. 3, England, Ark.—Bids until Sept. 13 to construct 2 mi. of macadam road and 11 mi. of resurfacing.

**Road Construction.**—Little River County Road Improvement Dist. No. 6, Ashdown, Ark.—Open bids August 30 to construct 11 mi. gravel road; Joel Mills, Dist. Secy., Wilton, Ark.; Parkes Engineering Co., Engr., Pine Bluff, Ark.

**Road Construction.**—Comms. Randolph County Road Dist. No. 3, W. L. Pope, Secy., Pocahontas, Ark.—Bids until Sept. 2 to construct 9.4 mi. macadam road; 54,000 cu. yds. excavating, 8218 lbs. reinforcing steel, 8936 cu. yds. local crushed stone surfacing, etc.; \$75,000 available; plans and specifications on file with County Clerk at Pocahontas, State Highway Dept., Little

Rock, and Pritchett & Hight, Engrs., Walnut Ridge, Ark.

**Road Construction.**—Monroe County Road Improvement Dist., Elmo, Chaney, Secy., Brinkley, Ark.—Open bids Sept. 6 on road construction; will build 14 mi. gravel road and 8 mi. concrete; probably now let gravel construction only; Parkes Engineering Co., Engr., Pine Bluff, Ark.

**Road Construction.**—Wheeler County Comms., Wheeler, Tex.—Bids until Sept. 2 at office County Clerk to construct 28 mi. sand-clay road; 16,353 cu. yds. earth excavation; 35,700 lin. ft. machine grading; 133.7 cu. yds. concrete pavement, etc.; plans and specifications on file with County Clerk at Wheeler; Hess & Skinner, Consult. Engrs., Dallas, and State Highway Dept., Austin, Tex.; L. D. Miller, County Dept.

**Rope (Wire).**—Saginaw Coal Co., Box 11 Sta. A, Chattanooga, Tenn.—Prices on 600 ft. 1¼-in. or 1½-in. wire rope; new or second-hand.

**Saw Rig.**—Thos. L. Barret, 127 N. Third St., Louisville, Ky.—Dealers' prices on double arbor saw rig equipment; for contractors' use.

**Saw Rigs.**—R. R. Sawyer, 1917 Harrison St., Little Rock, Ark.—Prices on saw rigs and contractors' equipment.

**Sawmills.**—Anthony S. Hill, 90 West St., New York.—Dealers' prices on 2 complete second-hand band mills, for use in Canada; 1 to have 30,000 to 50,000-ft. capacity; other 100,000-ft. capacity; describe and state location.

**School Furniture and Supplies.**—M. L. Cardona, care of M. L. Cardona Engineering Co., 14 Morgan Bldg., El Paso, Tex.—Catalogs and prices on school furniture and supplies.

**Sewage-disposal Plant.**—Directors North Texas Hospital for Insane, Terrell, Tex.—Bids to construct sewage-disposal plant; plans and specifications on file with Geo. F. Powell, Supt., Terrell, and A. D. Duck, Consult. Engr., Greenville, Tex.; bids opened August 26.

**Sewer-construction Materials.**—City of Thomson, Ga., C. A. Farmer, Clerk.—Prices on terra-cotta, iron catch-basins, etc.

**Sewer Construction.**—City of Duncan, Okla., J. B. McLendon, Mayor.—Open bids Sept. 9 on 38,000 ft. lateral sewers, lateral Sewer Dist. No. 1; Engr., Benham Engineering Co., Colcord Bldg., Oklahoma City.

**Sewing Machines (Portable).**—A. C. V. care of Manufacturers Record, Baltimore, Md.—Catalogs and prices of small sewing machines, without frame, for attachment to ordinary table; standard makes.

**Shears (Gate).**—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Prices on second-hand gate shear, 5 to 6-ft. blade, ¾-in. capacity, with suitable table, guides and back-stops for shearing plates.

**Soapstone Powder.**—Galloway-Kennedy Co., Clarendon, Ark.—Data and prices on soapstone powder; large quantity.

**Stave Saws.**—I. R. Longworth Co., Somerset, Ky.—Prices on two 24 or 26-in. saws for barrel staves.

**Tanks (Iron or Steel).**—Greenwood Patent Co., Jas. Messina, Prest.-Mgr., Greenwood, Fla.—Prices on 2 or more 8000-gal. galvanized iron or sheet-steel tanks.

**Timber (Locust).**—Black Locust Treanil Co., Robt. P. Harris, Mgr., Asheville, N. C.—Locust timber for treenail manufacture.

**Toys and Novelties (Wooden, etc.).**—Steinbach, 2402 Madison Ave., Baltimore, Md.—Correspondence, view to placing orders for "kiddie ponies, gondolas, novel baby coaches, collapsible baby walkers and shoes, also other original, useful and salable novelties and toys."

## RAILROAD CONSTRUCTION

### RAILWAYS

**Md., Sparrows Point.**—Railroad yards of the Bethlehem Steel Co. at Sparrows Point are to be extended. W. F. Roberts is V.P. and Mgr. of the company.

**W. Va., Lowesville.**—Indian Creek & Northern Railway Co., capital \$50,000, is inc'd. to operate a short line from Lowesville to Blacksville, W. Va., headquarters at Fairmont, W. Va. Incorporators: J. W. Devision and C. A. Philippi of Granttown, W. Va.; S. D. Brady, James Close and James A. Meredith of Fairmont. Mr. Brady is Consult. Engr. of the Monongahela Railway.

August 29, 1918.]

## To Employers and Important Executives— A Government Proclamation The Army Needs Your In- fluence in an Emergency—

This is a man-to-man appeal for you to help the Government grasp a great opportunity and for you to discharge a grave responsibility.

The Allied program to speed up the war and quickly bring about the final overthrow of the German Armies calls for an immediate mustering of America's final contribution of man-power. We must raise our army to 5,000,000 men at once!

Nearly 3,000,000 of the needed 5,000,000 are already under arms—but Class 1 of the Draft will be exhausted by October 1. To go into the deferred classifications and take men essential to industries, and men with dependent families, is unwise.

A new Class 1 must be created at once. Laws are being framed calling upon men within certain ages to register (the War Department's recommendation is for 18 to 21 and 32 to 45 years as the age limits), and the President will appoint a Registration Day early in September.

Thirteen million men must register in a single day. Later these men will be classified. Industries will not lose men who are absolutely essential to them, and families will not lose their bread-winners. But every man must register.

### You are a center of influence

As an employer or an important executive you are a center of influence, and the Government needs your active co-operation in putting through this gigantic task without confusion or delay. Thirteen million men must be told of the law between now and Registration Day (watch newspapers for date); and they must understand the *why* of it, and just *where* and *how* they are to register. For these details ask your



**Watch the newspapers for the date and further details**

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United States Govt. Com. on Public Information

This space contributed for the Winning of the War by  
**MANUFACTURERS RECORD - Baltimore, Md.**

Local Board, or your city or county clerk.

You can reach the men in your employ more effectively than they can be reached from the outside. We earnestly urge, therefore, that you make definite plans, in the interest of a speedy VICTORY, and in the interest of your own business, to see that all of your men are properly informed, so that they can be promptly and correctly registered when the day comes.

*Every man between the ages to be specified in the President's Proclamation must register.*

### How you can help

Start at once to get in touch with your men. Bring to their attention the *need* for the registration and the *facts* about it. Get in touch with your Local Registration officials and co-operate with them.

Here are a few suggestions:

Arrange for talks to your men; place inspirational and informative bulletins on bulletin boards; establish Selective Service Information Bureaus; inclose slips in your men's pay envelopes.

Arrange for definite hours when the men in the different departments or sub-divisions of your business shall be allowed time to go and register. Post full lists of the men in your employ between the specified ages, the men to check off their names after they have registered.

Many other ideas, applicable to your own business, will doubtless occur to you.

This is an emergency such as this country has never faced before, and the Government must depend upon you to bring all of your influence and inspiration and ingenuity to bear out this problem, that this crisis in the war may be met in a way that shall avoid hardship to the businesses and families of the nation.

Signed: **E. H. CROWDER**  
PROVOST MARSHAL GENERAL

Approved: **NEWTON D. BAKER**  
SECRETARY OF WAR



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## FINANCIAL NEWS

The MANUFACTURERS RECORD invites in-  
formation about Southern financial matters,  
items of news about new institutions, divi-  
dends declared, securities to be issued,  
openings for new banks, and general dis-  
cussions of financial subjects bearing upon  
Southern matters.

### FINANCIAL CORPORATIONS

Ark., Benton.—Farmers & Merchants' Na-  
tional Bank chartered; capital \$25,000.

Ark., Dardanelle.—First National Bank or-  
ganized; capital \$25,000.

Ark., Des Arc.—First National Bank or-  
ganized; capital \$25,000.

Ark., Marianna.—Bank of Marianna ac-  
quired McClintock Banking Co.; Max D. Mil-  
ler, Pres.; Hugh Mixon, Cashier.

Ga., Dublin.—Southern Exchange Bank  
purchased Commercial Bank; capital \$50,-  
000; continue under same name; begin busi-  
ness Sept. 15.

Ga., Quitman.—The First National Bank  
and the Citizens' Bank, it is stated, are to  
be merged under the name of the former  
institution and the capital increased to  
\$150,000.

Ga., Rhine.—Rhine Banking Co., capital  
\$25,000, organized; W. P. Cobb, Pres.;  
W. A. Wilcox, 1st V-P.; J. J. Harrell, 2d  
V-P.; S. J. Brown, Cash.

La., Cedar Grove.—Cedar Grove State  
Bank chartered; capital \$15,000; Raymond  
Cornell, Pres.; B. E. Gray, V-P.; U. S.  
Bartemus, V-P.; B. R. Hendricks, Cashier.

Mo., Union.—Farmers & Merchants' Bank  
incptd. with \$40,000 capital.

Mo., Plattsburg.—Clinton County Trust  
Co., capital \$15,000, organized with H. L.  
Smau, Pres.; P. J. O'Malley, V-P.; Ira  
James, Cashier.

Mo., Valler.—S. H. Long will organize  
bank.

Okla., Balke.—Bank of Balke organized;  
F. L. Carson, Pres.; F. R. Zacharias, V-P.;  
H. E. McKeever, Cashier.

Okla., Soper.—Liberty State Bank incptd.;  
capital \$15,000; F. B. Brown, Pres.; S. E.  
Nelson, V-P.; L. G. Webb, Cashier.

Okla., Tar River.—Gardin State Bank, cap-  
ital \$15,000, incptd. by S. S. Potter, T. G.  
Dunlap and Charles F. Jones.

S. C., Andrews.—Farmers & Merchants'  
Bank incptd.; capital \$50,000; directors: D.  
S. Porter, D. L. Moyd, J. M. Irby, L. A.  
Rogerson and others; begin business Nov. 1.  
(Lately noted commissioned.)



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S. C., Barnwell.—First National Bank  
conversion of the Barnwell Banking Co.  
applied for charter; capital \$50,000.

S. C., Cheraw.—Mutual Building & Loan  
Association, proposed capital \$75,000, is being  
organized by G. W. Duvall, R. T. Carter  
and L. M. Evans.

S. C., Trio.—Bank of Trio chartered, cap-  
ital \$30,000, by W. T. Rowell and J. W. Moore  
of Trio, H. N. Shepard of Bryan, R. C. and  
E. C. Epps of Kingstree, S. C.

Va., Alexandria.—Equitable Investment Co.  
Inc., capital \$5000 to \$25,000. Incorporated  
Frank B. Hoag, Pres.; William W. Boyd,  
Secy.-Treas.; Charles L. Vermillion, Atty.  
of Washington, D. C.

### NEW SECURITIES

Ala., Fort Payne.—City voted \$14,000 elec-  
tric-light bonds; \$1000 denomination; 5 per  
cent; maturity 30 years; Tom Sawyer  
Mayor. (Herebefore noted to vote.)

Ark., Bridge Junction.—(Levee).—St. Fran-  
cis Levee Dist. of Arkansas, H. D. Tomlin-  
son, Pres. Board of Directors, asks bids  
until 11 A. M. Sept. 17 for \$200,000 of 5 1/2 per  
cent. 30-year bonds.

Ark., Little Rock.—(Farm Credit).—Tom L.  
Terral, Secy. of State, advises the Manufac-  
turers Record: An amendment of our con-  
stitution allowing the issue of Farm Credit  
Bonds is to be voted upon this fall. (Expe-  
des recent item reporting such an issue.)

Ark., Texarkana.—(School).—Texarkana  
Special School Dist., Board of Directors,  
will receive bids until 9 A. M. Sept. 4 for  
\$30,000 of bonds.

Fla., Quincy.—Gadsden County Commrs.  
F. F. Morgan, Clerk, receives bids until  
Sept. 21 on \$30,000 bonds; 5 per cent; pay-  
able annually; principal due and payable as  
follows: Nos. 1 to 3, \$1500, July 1, 1935;  
3 to 5, \$1000, July 1, 1935; 5 to 8, \$1500, July  
1, 1935; 8 to 10, \$1000, July 1, 1935; 10 to 11,  
\$1500, July 1, 1935; 11 to 13, \$1500, July 1,  
1935; 13 to 16, \$1500, July 1, 1935; 16 to 19,  
\$1500, July 1, 1935; 19 to 22, \$1500, July 1,  
1935; 22 to 25, \$1500, July 1, 1935; 25 to 29,  
\$2000, July 1, 1935; 29 to 32, \$2000, July 1,  
1935; 32 to 37, \$2000, July 1, 1935; 37 to 41,  
\$2000, July 1, 1935; 41 to 46, \$2000, July 1,  
1935; 46 to 50, \$2500, July 1, 1935; 50 to 55,  
\$2500, July 1, 1935; 55 to 58, \$2500, July 1,  
1935; 58 to 60, \$2500, July 1, 1935.

Ga., Macon.—(Sewer, Auditorium, Hospi-  
tal, Park).—City, David S. Jones, Clerk,  
will receive bids until 5 P. M. Sept. 17 for  
\$55,000 sewer, \$55,000 auditorium, \$75,000 hos-  
pital and \$15,000 park 4 1/2 per cent. bonds.

La., Monroe.—(Garbage Incinerator Plant).  
City is authorized by Capital Issues Com-  
mittee, Washington, to sell bonds for gar-  
bage incinerator plant. H. D. Aggar,  
Mayor.

Miss., Marks.—(Drainage).—Newsom Lake  
Drainage Dist. Commrs., H. D. Giam,  
Chrmn., will receive bids until 11 A. M.  
Sept. 5 for \$149,772 of not exceeding 6 per  
cent. bonds.

Mo., Mexico.—(Hospital).—Audrain County.  
R. B. Cauthorn, Clerk County Court, said  
\$75,000 of 5 1/2 per cent. \$1000 denomination  
bonds, dated May 1, 1918, to Mortgage  
Trust Co., St. Louis. (Lately noted sold.)

N. C., Belhaven.—(Electric, Funding).—  
Board of Aldermen will open bids at noon  
Sept. 16 for \$25,000 electric-light and \$10,000  
funding 6 per cent. bonds.

N. C., Durham.—(Water).—City plans to  
issue \$100,000 of bonds; sale to take place  
Sept. 10 and delivery Sept. 16. Address Board  
of Aldermen.

N. C., Charlotte.—(School).—Mecklenburg  
County Board of Education, W. E. Price,  
Chrmn., will receive bids until noon Sept.  
23 for \$6000 of 6 per cent. 30-year bonds  
Special School Dist. No. 5, White, Paw  
Creek Township.

N. C., Tarboro.—(Light, Power).—City, J.  
H. Jacobs, Clerk and Treas., will receive  
bids until 8 P. M. August 30 for \$50,000 of 4  
per cent. bonds, dated July 1, 1918, and  
maturing 1919 to 1938, inclusive; denomina-  
tion \$1000. (Lately noted.)

Okla., Duncan.—(Light, Sewer, Water).—  
City votes Sept. 2 on municipal improve-  
ment bonds. C. W. Fowler, City Clerk.

Okla., Guthrie.—(Water).—City contem-  
plates voting on \$165,000 of bonds. Address  
The Mayor.

Okla., Hominy.—(Water-works).—City voted  
\$50,000 bonds. It is expected that the Capital  
Issues Committee will soon approve the  
issuing of the securities. Leander Hall, City  
Clerk.

Okla., Paul's Valley.—(Water, Sewer, Park,  
etc.).—City, Eugene Turner, Treas., rejected

August 29, 1918.]

all bids August 5 for the \$45,000 of 5 per cent. \$1000 denomination water, sewer, fire equipment and park bonds offered on that date.

Ola, Shawnee—(Hospital).—Bids received Sept. 1 by Geo. B. Caruth, City Clerk, for \$65,000 of 5 per cent. bonds.

Tenn. Bristol—(Street).—City is authorized to offer for sale \$46,000 of 6 per cent. bonds, dated Oct. 1, 1918. Address The Mayor.

Tex. Bay City—(Road).—Matagorda County Road Dist. No. 8 voted \$65,000 of 5 1/2 per cent. 30-year bonds. John F. Perry, County Judge.

Tex. Brownsville—(Municipal Improvements).—City voted \$350,000 of bonds. Address The Mayor.

Tex. Clarksville—(Road).—Red River County Commrs., R. J. Williams, Judge, asks bids until noon Sept. 10 for \$73,000 of 5 per cent. 30-40-year bonds.

Tex. Cuero—(Road).—Road Dist. 4, De Witt County, voted \$40,000 of 5 per cent. bonds. Address County Commrs.

Tex. Dallas—(Road).—Dallas County \$250,000 road bond issue recently sold has been approved by Atty.-Gen. (Lately noted.)

Tex. Dallas—(Levee).—City reported to have voted August 29 on \$414,000 bonds. Result not stated. Address The Mayor.

Tex. Electra—(Water-works).—City voted \$35,000 bonds. Address The Mayor.

Tex. Lufkin—(Road).—Angelina County reported to have voted \$75,000 bonds. Address County Commrs.

Tex. Texas City—(Warrants).—City sold to J. L. Arlitt, Austin, Tex., \$5000 of 7 per cent. 1-10-year \$500 denomination warrants issued to refund floating indebtedness.

## FINANCIAL NOTES

Harlingen State Bank, Harlingen, Tex., increased capital from \$15,000 to \$20,000.

Citizens National Bank of Antlers, Okla., increased capital from \$25,000 to \$40,000.

Hugo National Bank, Hugo, Okla., increased capital from \$50,000 to \$100,000.

Citizens' National Bank, Orange, Va., increased capital from \$50,000 to \$60,000.

## General Sales Manager Appointed.

Announcement is made of the appointment of L. J. Voyer as general manager of sales of the Liberty Steel Co., Warren, O.

## Expanding Business Compelled Enlargements.

The Cincinnati Frog & Switch Co. has made substantial increases in its equipment and also extensions to its plant, which is situated at Oakley, Cincinnati, O. At one end of the building a stockroom has been provided containing modern fittings, while at the other end a considerable addition has been erected. Three cranes have been installed inside of the plant, while outside there has been erected a five-ton three-motor crane with a span of 96 feet. The office building has also undergone changes to accommodate the increasing clerical force required by the large amount of business secured, and it may be necessary to move it to another location if the plant itself has to be further extended. A change was made in the executive force by the election of A. J. Endebrack as secretary and treasurer. He has been associated with the company almost from its beginning and is familiar with details of the business under his supervision.

## Lumber Property to Be Sold.

Announcement is made in another column that the property of the Champion Lumber Co. will be sold at auction at Waynesville, N. C., at noon on Monday, September 23, under a court decree. The property consists of 90,000 acres of timber lands in Haywood County, N. C., on which are two sawmill plants, each of 150,000 feet daily capacity, besides 35 miles of logging railroad and 2 miles of standard railroad, other buildings, cars, engines, machinery, etc., and about 13,000,000 feet of manufactured lumber, at Sunburst and Crestmont, N. C., besides logs in the woods, two stocks of goods usually inventoried at from \$30,000 to \$40,000, one at each of those places, besides numerous items of personal property, which are enumerated in the formal notice of the sale, that also contains other important particulars. The receivers, R. G. Rogers and H. A. Cleaver, at Sunburst, will permit inspection of the property if requested. Further information will be given by Henry B. Stevens of Asheville, N. C., or A. B. Kimball of Greensboro, N. C., who are the commissioners appointed to conduct the sale.

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A third unit of 30,000 k. w. is on order and will be installed at an early date.

The new power-house has been built to accommodate a fourth unit, making an aggregate capacity of 120,000 k. w., which, together with the several other power plants forming the electric generating system of the Columbia Gas & Electric Company, will give a total combined capacity of 169,000 k. w.

The United States Government recently executed a contract for the construction of a large nitrate plant located at Cincinnati, which will take from the plants of The Union Gas & Electric Company 40,000 k. w. of power.

For details and information apply: Cincinnati Chamber of Commerce or The Union Gas & Electric Company, Cincinnati, Ohio.

## COLUMBIA GAS & ELECTRIC Co.

August 29, 1918.]

## If You Have Never Attended The Chemical Industries Exposition You Should Do So For These Reasons

- ¶ This greatest of world wars is a war of chemists: Chemistry will win the decisive battle.
- ¶ Chemistry is the basis, the vitality of all industry.
- ¶ No industry can progress or prosper without being properly founded upon the immutable laws of chemistry.
- ¶ Business men realize that the present need for increased production, the future for world trade competition, as well as domestic, invaded by foreign competition after the war—require the utmost in plant and business efficiency.
- ¶ The Exposition of Chemical Industries is the acme of efficiency, where manufacturers and business men will be introduced to the materials, machines, apparatus, equipment and processes that vitalize industry. The chemistry of each is an outstanding feature.
- ¶ There are numerous other features to grip and hold the attention and to show you how best to make your business more productive and prosperous. Make for yourself and your product a forerank in the world of commerce through a visit to and the benefits derived from the

### Fourth National Exposition of Chemical Industries

Grand Central Palace, New York

WEEK OF SEPTEMBER 23rd, 1918



# Classified Opportunities

## MINERAL AND TIMBER LANDS WATER POWERS MISCELLANEOUS PROPERTIES

**MECKLENBURG CO., VA., FARMS FOR SALE.** On Roanoke River, about 200 acres, with river running through center of it, with an undeveloped water-power estimated 20,000 H. P., and half of land rich and fertile river bottom, making 50 bushels corn and 4 tons of soy-bean hay per acre; in 4 1/2 miles of railway station on Southern Ry. Price, from \$25 to \$35 per acre. For sale by L. H. Yancey, Box 232, Clarksville, Va.

**FOR SALE**—8000 acres, 15 miles from Richmond, Va., with five feet of excellent coal within 10 feet of surface. All good for farming; no waste. Will also make fine hunting preserve, as it is now well stocked with deer, turkeys, quail, etc. R. B. Chaffin & Co., Inc., Richmond, Va.

**PEAT BOG**—Three hundred acres; will average ten feet deep. A. C. L. Ry. runs through center. Fifty miles from Wilmington, N. C. Sell or lease; liberal terms. D-189, Lincolnton, N. C.

**FOR GOOD VALUES** in Virginia blue grass or general purpose farms, coal and timber lands, and Roanoke City and suburban property, factory sites particularly, address Ellis L. Wright, 313 South Jefferson Street, Roanoke, Va.

### OIL PRODUCTION

**520 ACRES** of partly-developed oil and gas leases for sale. This property has eight producing wells fully equipped with modern power plants, paying a good dividend in the surest oil and gas field in the world—Oklahoma. Great possibilities on full development. Will sell all or an interest for further development purposes. W. D. Hume, Muskogee, Okla.

### MINERAL LAND WANTED

**WANTED**—To hear from parties owning any kind of mineral property.  
**UNITED MINERALS CO.,**  
ROANOKE, VA.

### WATER POWER

**FOR SALE**—To close an estate. Two fine water powers in the Southern Appalachian range. Well located, one on the Southern Railroad, the other one within two miles of the railroad. If interested, address No. 5169, care Manufacturers Record, Balto., Md.

### FIRE-CLAY LAND

**FOR SALE**—Large tract of fire-clay land in Southern Pennsylvania. Well-known vein, hard and soft clay; best in State. Good railroad facilities. Address P. O. Box 584, Philadelphia, Pa.

### MANGANESE ORE LANDS WANTED

**IF YOU** have high-grade manganese ore in the Southern Appalachian section, and are willing to let the operator make part of the money, write full particulars to No. 5074, care Manufacturers Record, Balto., Md.

### MANGANESE ORE LANDS

**700 ACRES MANGANESE ORE LANDS** for sale; engineer's estimate, 800,000 tons; railroad one mile; now mining with pick and shovel; analysis and records available. Address Duak Aydelott, Tullahoma, Tenn.

### COAL LANDS AND MINES KENTUCKY GAS & BY-PRODUCT COAL.

Operating mines, Harlan & Hazard, Fields, sold to consumers of Central West. Low sulphur and ash, especially suited for malleable-iron producers. Consumers can assure themselves of uniform quality and desired quantity. Agents also for virgin coal lands. Reference—any Louisville bank. Upon request will be pleased to refer to large consumers whom I have located in this territory.

J. STODDARD JOHNSTON

PAUL JONES BUILDING,  
LOUISVILLE, KY.

### COAL SHORTAGE NOTICE.

Have 550 acres coal land, 4 1/2-foot seam, good steam and domestic coal, estimated over 3,000,000 tons; large capacity. Mines operating on 3 sides; L. & N. R. R. through it. Accessible to Cincinnati, Louisville, Nashville, Memphis and vicinity. Will sell all or part. Will lease on royalty or will give control of coal and guaranteed profit to company that will finance development. Further particulars, address O. C. Evans, Greenville, Ky.

### COAL AND TIMBER LAND

#### BITUMINOUS COAL.

Single tract of 5000 acres of virgin coal, carrying five workable seams. Trunk-line railroad on the tract. No uncertainty, because coal seams are exposed, and the quality and marketability of the coals are established by large mining operations now and for 20 years in progress along three sides of this 5000-acre tract. Address Senojex, Glen Summit Springs, Luzerne County, Pa.

## RATES AND CONDITIONS

Rate 25 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 23c. per line; 300 lines, 21c. per line; 500 lines or more, 20c. per line.

### COAL AND TIMBER LAND

**FOR SALE**—W. Va. mine, operating two seams; 400 acres; 125 tons daily; permanent disability managing owner reason for sale. National Realty Sales Co., Charleston, W. Va.

**FOR SALE**—2500 acres cheap mined coal land; adjacent railroad; oil tests; gassers top drift seam; down to railroad. Cavanagh, McAlester, Okla.

**FOR SALE**—Bargain; 90,000 acres Tennessee coal and timber land in parcels of 5000 to 10,000 acres, or together, \$3.00 to \$10.00 per acre; part on railroad, part fine virgin timber; good titles; exposures of highest grade coking coal. Owned by estates. E. H. Benoit, 1921 Boatmen's Bank, St. Louis, Mo.

**50,000 ACRES** Tennessee coal and timber lands, located in Lincoln, Franklin and Coffee counties; must sell to settle partnership. Price \$2.50 per acre; \$15,000 cash, balance on ten equal annual payments. Would accept exchange property to the amount of one-half. T. N. Figuers, Jr., Columbia, Tenn.

### LOANS ON TIMBER LANDS

**SALES NEGOTIATED**  
Check Estimates for Loans on Timber Lands. Consulting Forester and Timber Land Factor. 25 Years' Experience All Parts of Country.  
F. R. MEIER,  
165 Broadway, New York, N. Y.

### TIMBER OPERATION

**ABOUT** one hundred million feet standing timber, short-leaf pine, in North Carolina; well located. Can also furnish equipment, including rail, locomotives, skidders, team, sawmill, planing mill and drykiln equipment, in splendid condition. William P. Redd, 30 North Ninth St., Richmond, Va.

### DOGWOOD WANTED

**IN LARGE QUANTITIES.**  
We buy in logs and also ready-sawed blocks. For information write to Brevard Manufacturing Co., Brevard, N. C.

### TIMBER WANTED

**WANTED**—WALNUT TIMBER.—The Government needs it to help win the war. If you have any of this timber, it is your patriotic duty to sell it now. We are paying the highest market prices. Bristol Door & Lumber Co., Bristol, Tenn.

**WANTED**—15,000 or 20,000 acres hardwood, Atlantic seaboard, for light-barrel cooperage. Address No. 5163, care Manufacturers Record, Baltimore, Md.

### TIMBER

**FORTY MILLION FEET** of pine, principally long leaf, on navigable water in Georgia, with band mill ready to operate. Much of it fine piling. R. B. Chaffin & Co., Inc., Richmond, Va.

**CYPRESS TIMBER FOR SALE**—About 3,000,000 feet of cypress, some being located in West Tennessee, and in the Hatchie River bottom and within four miles from the railroad. This cypress is of good grade, and the trees are of medium size. F. H. Voltermann, Brownsville, Tenn.

**FOR SALE**—Thirty-two million feet of hardwood stumpage, including ties and shop-oaks, for forty thousand dollars. Ten years to cut and remove. Forty thousand cords of tannin acid wood also included. Address No. 5165, care Manufacturers Record, Balto., Md.

**FOR SALE**—About 25 million feet very fine pine timber. Ideal logging winter or summer. Water convenient. On and near two railroads and river and "Dixie Highway." A rare opportunity. W. P. Dunlap, Wadesboro, N. C.

**FOR SALE**—Fifty million feet of fine South Carolina timber, consisting of thirty-nine million feet red gum, five million oak, three million cypress, three million short-leaf pine. This timber is very large and of fine quality; easily logged at any time of the year. Price reasonable. Accessible to railroads. Will hear closest investigation. Address No. 5033, care Manufacturers Record.

### TIMBER LAND

**19,000 ACRES** virgin timber, Lee County, Florida. Rail and water transportation. Title perfect. Land and timber \$6 acre, 1/2 cash. The timber alone will pay all. After timber is off could be sold \$25 per acre for orange grove land. Sadler, Fort Myers, Fla.

### FARM AND TIMBER LANDS

**THE** finest cattle and hog ranch in the Southern States; 22,400 acres; timber in lumber and turpentine will pay for land, timber and all; within 6 miles of five railroads; every acre rich land; fine grazing from January to January; full of all kinds game and fish. Price, \$4 an acre; worth twice the money. W. J. Norris, 513 Empire Bldg., Atlanta, Ga.

**30,000 acres** long-leaf pine, cruised to better than 50,000,000; part finest citrus and truck land; will retail for from \$50 to \$100 per acre; 3/4 mile from railroad. Price, \$9 per acre. Lake Region Land Co., Lakeland, Fla.

**WE OWN LARGE TRACTS OF TIMBER LANDS**, cut-over lands and colonizing lands. If interested, address H. H. Wefel, Jr., & Co., Mobile, Alabama.

### FRUIT, FARM AND TRUCK LANDS

**THESE COLUMNS** ARE CLOSELY READ BY PEOPLE for information of all kinds about Southern properties of every description. If you have a property of any kind that you want to dispose of, try an advertisement in these columns. Others have to their advantage. For rates see head of department.

### ALABAMA

**TEN MILES** from Montgomery, Ala., on gravel road, we have a beautiful farm, consisting of 974 acres. Part of this is black prairie land, suitable for alfalfa and grain, and other land suited for cotton and other crops. Nice dwelling and tenant-houses. Price only \$40 per acre. Duskin & Stewart Realty Co., Montgomery, Ala.

### FLORIDA

**A BEAUTIFUL WINTER HOME**, a profitable orange and grapefruit grove, a general farm, cattle, hog or poultry ranch in the famous Indian River section, Vero, Florida. The wonderful climate permits not only agricultural operations all the year, but all enjoyable, life-prolonging outdoor sports. Investigate now this wonderfully charming section. Indian River Farms Company, First National Bank Building, Vero, Florida.

**ONE OF THE BEST** orange groves in Florida. Present crop estimated at \$30,000. Owner has to go to war. Write today. B. M. Sims, Ocoee, Florida.

### GEORGIA

**CATTLE RANCH**—12,374 acres; 7000 under wire fence; South Georgia, near railroad; mild climate; long grazing season; 10-room residence, tenant-houses, barns, silos, telephone line; graded auto road. \$10 per acre, including 250 cattle, 10 miles, farm implements, tools, etc.; terms. C. C. Brown, 501 Grand Bldg., Macon, Ga.

**BARGAINS IN FARM LANDS**—For real bargains in Middle Georgia farm lands get in touch at once with Stubbs & Ezell, Real Estate Brokers, Eatonton, Ga.

### MISSISSIPPI

**FOR SALE**—Small farm, near Gulfport, Miss.; house and well; walking distance of beach; good abstract; bargain for cash. Harry B. Shibley, Van Buren, Ark.

### SOUTH CAROLINA

**TO SETTLE AN ESTATE**, I offer for sale 1000 acres unimproved lands in small farms, well located in the famous Black River-Pudding Swamp County. The four prize corn-club boys of Sumter and Clarendon counties live on adjacent lands. The tobacco crop on a small part of a nearby farm of similar soil in 1917 paid for the whole tract. This can be done on these lands. E. W. Dabbs, Trustee, Mayesville, S. C.

### VIRGINIA

**FOR SALE**—100 acres fine orchard land, with 700 bearing trees.  
**LIBERTY REALTY CO.,**  
ROANOKE, VA.

## BUSINESS OPPORTUNITIES

**FARMING OPPORTUNITIES AND INDUSTRIAL SITES** along the Winston-Salem and Southbound Rwy. Co. Here climate, transportation, good roads, fine schools and excellent markets contribute to the success of farming, and the large and prosperous industrial centers along our lines offer splendid locations for industries of various kinds. Address S. P. Collier, Jr., Winston-Salem, N. C.

**FOR SALE**—197 acres near Washington, D. C. \$197,000 clear profit if property developed. Ideal location; 15 minutes from heart of Washington, now a world center where population will grow into millions. Exceptional opportunity for small cash payment, balance long time. Owner leaving Washington. Write for particulars. J. Cloyd Ryan, Arlington, Va.

**BACK-FILLING MACHINE**, covered by patents in five countries. Will back-fill water and water trench for one-half the expense of any other machine. Will fill in fourteen-foot alley. Wish to correspond with manufacturer either for sale of patents or royalty basis. Have patterns and blueprints. Machines in operation five years. H. W. Carrwell, Port Arthur, Tex.

**FOR SALE**—Patented spark plug, especially designed for Ford cars. Will pay to investigate. I haven't the money to put them on the market. Converse, 4504 So. Main, Kansas City, Mo.

**YOUR FARM** subdivided, properly advertised and sold at auction will bring more money than if sold as a whole. We have had the experience and can get the results. Carolina Realty Company, Raleigh, N. C.

**FURNITURE OR WOODWORKING FACTORY WANTED** to fill large orders of kiddie ponies, gondolas, novel baby coaches, collapsible baby walkers and shooflies, and 10 other original, useful, salable novelties and toys. Steinbach, 2402 Madison Ave., Baltimore, Md.

**WANTED**—Responsible party to log and saw million feet of lumber; will pay a good price. Liberty Lumber Yard, Roanoke, Va.

**FOR SALE**—Plant having daily capacity one and one-half tons sodium sulfide and three tons barium salts, located Curtis Chemical district, Baltimore, on railroad. Address No. 5158, care Manufacturers Record.

**NEW GARAGE** in Fayette, Mo., 500 county-seat, 3 schools, well located; the farm, 3 miles west of Armstrong; from house, with light and water. All in cultivation. Come and investigate, and we'll show you. Address Alex. Denny, 200 Darts St., Fayette, Mo.

**WE CAN SELL YOUR BUSINESS** for cash, no matter where located; no publicity. Describe fully in first letter. All correspondence confidential. Herbert, Webster Bldg., Chicago.

**WANTED**—Active or silent partner to develop mining proposition in Southeastern Kentucky. We own land in fee and now leased. Two seams of good coal in heart of proven district. Switches allowed; grading done; steel bought and on the ground. Small amount needed to develop, or will sell. Dry Branch Coal Co., Box 3, Gray, Ky.

**IF YOU** cannot secure elsewhere a purchase of a sale, try Dennis Thibault, who broker and commission merchant, 15 Whitehall Street, New York, N. Y.

## GOVERNMENT CONTRACTS

**REPRESENTATION** before Congress, all Courts, Government Boards and Departments. We specialize in daily reporting Government requirements. Expert attention to Government bidders and contractors. U. S. Legal Corporation, Washington, D. C.

## INCORPORATING COMPANIES

**DELAWARE CHARTERS.**  
Stock Without Par Value.  
Directors Need Not Be Stockholders.  
Other important amendments (March 20, 1934).  
Write for new DIGEST (4th ed.).  
**CORPORATION COMPANY OF DELAWARE**  
Equitable Building, Wilmington, Delaware.

## TRADE ACCEPTANCES

"Trade Acceptance" forms supplied. Request sample. Commercial Form Co., Inc., N. J.

## FINANCIAL

**COMPETENT ORGANIZER** and financial executive will consider marketing stocks of bonds of essential established enterprise of project. Will deal only with principals who are willing to defray charges necessary in investigation and marketing. Address Randolph, P. O. Box 1043, Detroit, Michigan.

# Classified Opportunities

## PATENT ATTORNEYS

**PATENT YOUR IDEAS.**—\$9000 offered for certain inventions; book, "How to Obtain a Patent," and "What to Invent," sent free upon request; send rough sketch for free opinion as to patentability. We advertise your patent for sale at our expense. Chandler & Chandler, Patent Attorneys, 978 F St., Washington, D. C.

**PATENTS, TRADE-MARKS AND COPYRIGHTS.**—Write for list of patent buyers and inventions wanted. \$1,000,000 in prizes offered for inventions. Send sketch for free opinion as to patentability. Our four books sent free. We assist inventors to sell their inventions. Victor J. Evans Co., Patent Attorneys, 712 Ninth St., Washington, D. C.

**PATENTS AND TRADEMARKS**  
Procured by a former Examining Official of the U. S. Patent Office.  
**NORMAN T. WHITAKER,**  
Mechanical Engineer,  
Attorney-at-Law, Washington, D. C.  
Inquiries Invited.

**PATENTS THAT PROTECT AND PAY.**  
Advice and books free. Highest references. Best results. Promptness assured.  
Trade-Marks registered.  
**Watson B. Coleman, Patent Lawyer,**  
447 F St., Washington, D. C.

## FACTORY SITES

**BALTIMORE FACTORY AND TERMINAL SITES.**—Statement of Asa G. Candler, President of The Coca-Cola Co.: "Investigation conducted in Baltimore is not only the commercial metropolis for Southern trade, but that it affords shipping opportunities both by water and rail for domestic and foreign traffic superior to any of the great cities in any section of the United States." Locate in Baltimore and derive these advantages. We can provide accommodations to meet your requirements.

**"OUR MOTTO":**  
• **FACTORY AND TERMINAL SITES IN BALTIMORE.**  
Wm. B. Martien & Co.,  
Sixth Floor, Lexington St. Bldg., Balto., Md.

**FOR SALE.**  
Ideal Location for Blast Furnace.  
Factory Locators,  
Roanoke, Va.

**MOTOR TRUCK FACTORY.**  
Ideal location for motor truck or automobile factory or assembling plant, near tide-water, surrounded by abundance of raw materials. Would take interest ourselves and like to correspond with manufacturers seeking location or with man of experience, ability and means who would organize and manage a company. Tallmeyer Lumber Company, Tallmeyer, Sabine County, Texas.

**FOR SALE—90 acres,** suitable for subdivision or factory site, one mile from Norfolk, Va. \$200 per acre. Address No. 5159, care Manufacturers Record, Balto., Md.

**FOR SALE.**  
Fine Location for Textile Mill.  
Factory Locators,  
Roanoke, Va.

**FOR SALE—Fine factory sites,** railroad frontage, abundance of water, electric power, street-car facilities; will sell from 1 acre up to 200 acres. Factory Locators, Roanoke, Va.

## INDUSTRIAL PLANTS FOR SALE

### ICE AND LIGHT PLANT

**COMBINATION ICE AND LIGHTING PLANT,** located in one of the healthiest sections of South Carolina; equipment in best of condition and urgent demand for all ice we can produce. Can arrange terms and give possession at once. Come and see it in operation. Boyd Utilities Plant, Johnston, S. C.

### ICE PLANT

**FOR SALE—Fifteen-ton steam-driven distilled-water ice plant complete.** Vogt machine. Location: Eldon, Missouri, division point on C. R. I. & P. Ry.; population 2500. Good market for entire output of plant. Reason for selling, owners are railway employees who cannot take personal charge of plant. Eldon Ice & Fuel Co., Eldon, Missouri.

### MANUFACTURING PLANT

**VACANT MANUFACTURING PLANT IN EAST ST. LOUIS, ILLINOIS.**  
Switch 435 feet long; 462 feet frontage on Illinois Ave. (brick paved, street-car line); 365 feet on Southern Railway; 462 feet on Cleveland Ave. (6-foot concrete sewer); 265 feet adjoining vacant property. Eleven buildings, viz.: Two-story brick office building, 34'x17'; one-story brick warehouse, 83'x66', with basement; one-story frame tin-clad building, 60'x44'; one-story brick and frame tin-clad building, 88'x50'; one-story frame tin-clad building, 88'x50'; one-story and basement frame tin-clad warehouse, 41'x21'; one-story frame stable, 44'x35'; four one-story frame buildings: 84'x48', 40'x48', 25'x15', 100'x15'. All roofs are tar and gravel. All buildings except office and the two warehouses are on grade level. Wm. E. Hadley, Trustee, Murphy Bldg., East St. Louis, Ill.

## INDUSTRIAL PLANTS FOR SALE

### LAUNDRY

**FOR SALE OR LEASE—FOUNDRY.**—Stoves and gray-iron castings; well-established business; splendid location; two railroad sidings. Reason for selling, extreme ill-health of owner renders it impossible to give it any attention. P. O. Box 6, Bristol, Tenn.

## AGENCIES WANTED

**A FIRM IN HAVANA, CUBA,** wishes to represent first-class manufacturers or exporters of chemicals, provisions, dry goods and silks. First-class references. Address Elie Nahum, P. O. Box 2145, Havana, Cuba.

**BALDWIN & HUNTER, Manufacturers' Agents,** 919 Bessemer Bldg., Pittsburgh, Pa., are prepared to represent manufacturers of mill supplies, etc. Correspondence solicited.

## SITUATIONS WANTED

**CIVIL ENGINEER and Const. Mgr.,** 32 years old, married; 14 years' experience in designing, estimating and dredge work as superintendent and works manager. Both light and heavy work. Would like to get in with some contractor where I could later get a chance to obtain an interest in the business. Address No. 5156, care Manufacturers Record, Balto., Md.

**MANAGER OPEN FOR POSITION.**—Man 36, technical education, long experience in manufacturing wherein scientific control and organization has been brought to high state of perfection, good business training and executive ability, desires permanent connection with a firm that knows they must grow. Neither present size, condition of operation nor salary most important. Address No. 5162, care Manufacturers Record, Balto., Md.

**GENERAL BUILDING SUPT.** of large experience will be out of employment soon, and desires to connect with a responsible contracting firm; will go anywhere. Address T. M. E., 136 Madison Street, Brooklyn, N. Y.

**WANTED—Opportunity of working with** or for some one mining manganese, chrome or some necessary ore. A. K. Prim, 3222 Spencer Terrace, Philadelphia, Pa.

## MEN WANTED

**THE new draft program is creating extraordinary opportunities for men who cannot enter active service.** Offer your services where you can deliver the greatest possible amount of individual aid to the war-time industrial program. If actually qualified for salary between \$2500 and \$25,000, communicate with undersigned, who will negotiate strictly confidential preliminaries for such positions; executive, administrative, technical, professional; all lines. Not an employment agency; undersigned acts in direct confidential capacity, not jeopardizing present connections. Established 1940. Send name and address only for explanatory details. R. W. Bixby, E 64-66, Niagara street, Buffalo, N. Y.

**WE WANT an office assistant for permanent position** in main office at Shawsville, Va. Applicant should understand accounts and be a fair stenographer. Give full details first letter. Work in connection with Government and other contracts now under construction. Vaughan Construction Company, Inc., Shawsville, Va.

**DRAFTSMAN WANTED.**—Must be familiar with piping layouts and general mechanical work. Pulp and paper mill or chemical plant experience preferred. State age, experience and salary expected, also where can report to work. Address No. 5184, care Manufacturers Record, Balto., Md.

**WANTED—Experienced double-entry bookkeeper,** with hardware experience. Excellent chance for the right man. Prefer man that can invest from \$5000 to \$10,000; investment secured. Give age, reference and salary expected on start in first letter. Address No. 5130, care Manufacturers Record, Balto., Md.

**SALES ENGINEERS WANTED.**—A leading manufacturing concern has openings for salesmen for power plant and engineering equipment, engines, pumps, air compressors, condensers, etc. Must be draft exempt or in Class Four. Give full details, age, education, experience, reference and salary. Address No. 5155, care Manufacturers Record.

**LOT SALESMEN WANTED.**—Men now earning \$2000 monthly; easy selling property in Kanawha Valley, W. Va. Large Government development, besides others. National Realty Sales Co., Charleston, W. Va.

## BOATS FOR SALE

**FOR SALE—Aux. schooner,** for towing and passengers. G. T. 85 tons. Draws 5 feet loaded. Write Box 8, Punta Gorda, Florida.

## MACHINERY AND SUPPLIES

**FOR SALE—1 Cameron pump,** 8x4x12. Firebox boiler on skids, 20 H. P. 1200 feet 2 1/2" pipe rotary dryer, 30 ft. long, complete and new. Chain elevator, with metal buckets, about 60 feet, complete. Some new fittings for Little Giant Rand drill. Warner Mining Co., Adairsville, Ga.

**FOR SALE—Complete outfit of 12-in. suction dredge,** consisting of pumps, engines, boiler, ladder, winch, etc., in good condition. Address Christian J. Larsen, Charleston, S. C.

**GASOLINE TRACTOR AND DUMP WAGONS FOR SALE.**—60 H. P. Pioneer 4-cylinder tractor, in first-class condition; 4 Troy wagons with dump body, capacity 4 yards, in good shape; 4 Gallion wagons with dump body, capacity 4 yards; wagons good, bodies need overhauling. An ideal outfit for mining or lumber camp, road builders or farmers. Entire outfit for \$1650. F. L. Wilson, 601 Main Street, Lynchburg, Va.

**FOR SALE—Two No. 3 Rochester heading jointers.** One small drykiln, complete with ball-bearing trucks and rough sides. One lot shafting and pulleys. One slab resaw. One vertical engine, 5x5. One 50-horse 12x16 Ames center-crank engine. One 50-horse return tubular boiler. Gray Lumber Co., Waverley, Va.

**FOR SALE—One 2 1/2-inch two-stage centrifugal pump;** one 3-inch two-stage centrifugal pump; one 3-inch Myers bulldozer, all guaranteed to be in good working condition. Also, about 2000 feet of 5 and 6-inch black wrought-iron pipe in excellent condition. Cohoon Bros., Orlando, Fla.

**FOR SALE—2 first-class narrow-gauge locomotives.** Harris-Lipsitz Lumber Co., corner Commerce and Austin Sts., Dallas, Texas.

**100 H. P. PORTABLE BOILER.** 1 00" Mass. standard Mumford locomotive type portable boiler on skids, 125-lb. pressure. Jas. G. Lacey, Hartford, Conn.

**FOR SALE**  
**75-HORSE-POWER BOILER.**  
F. M. HUGHSON,  
ROANOKE, VA.

**FOR SALE—MACHINERY**  
**IN 75-BRL. UP-TO-DATE MILL.**  
LIBERTY MILLS,  
ROANOKE, VA.

## MACHINERY AND SUPPLIES

**ONE 60 H. P. horizontal tubular boiler;** one 35 H. P. firebox boiler; one 10x10x12 Rand air compressor. Vicksburg Steam Laundry, Vicksburg, Miss.

**FOR SALE—30-horse Erie return tubular boiler,** in good repair. L. S. Olive, Apex, N. C.

Office Desks, Chairs, Tables, Filing Cabinets (wood and steel), Card and Loose-Leaf Systems, Safes and Vaults, Drafting Instruments and Materials, Mimeograph and Duplicating Supplies, Blank-Book and all kinds of Commercial Stationery. Every known Labor-saving Office Device. Send for catalog or special representative. Fielder & Allen Company, the Office Outfitters, Atlanta.

## MACHINERY and SUPPLIES WANTED

**WANTED—Mills, plants, electric machinery, drykilns.** We buy for cash f. o. b. shipping points. Our prices for old mills are the highest. Let us prove it. Meltreger Company, 1403 So. Blue Island Ave., Chicago, Ill.

**WANTED—Generator set,** 250 K. W., 250 volts, direct current, direct connected to engine. Centertown Coal Company, Centertown, Kentucky.

**WANTED—One second-hand watchman clock,** approved by underwriters; four or five stations enough. Yarbrough Co., Inc., Powhatan, La.

**FOR SALE OR EXCHANGE—Fifteen to twenty-horse-power Case steam tractor for truck, automobile or tractor.** Other exchange considered. Box 22, Cameron, N. C.

**FOR SALE—At a very low figure for cash or on reasonable terms:**  
One Weber gas engine, two-cylinder upright, 90 H. P.  
One Westinghouse generator, 8 No. 138133, 30 K. W., 775 revolutions, 110 volts.  
One Westinghouse generator, 8 No. 213102, 50 K. W., revolutions 835, 110 volts.  
One C. C. generator, 220 volts, 60 K. W., revolutions —.  
Balancing set for 3-wire, 35 K. W.  
Three-panel switchboards, with the switches, etc. Belted direct to gas engine.  
Address Franklin Hudson Publishing Co., 1421-23 Walnut St., Kansas City, Missouri.

# To Our Advertisers

## We Ask Your Co-operation

Owing to the labor shortage and the uncertainty of the mails at this time, we ask your co-operation in sending in advertising copy and cuts. It is our aim to give you the best service possible—submitting proofs and making changes whenever requested—but due to the unusual conditions to-day, it is necessary for us to strictly observe the following "Closing-down Dates."

When proofs of advertisements are required, copy and cuts must be in our hands two weeks in advance of date of publication and approved proof back one week in advance at the latest.

When proofs of advertisements are not required, copy and cuts must be in our hands one week in advance of date of publication.

Advertisers are requested to observe the necessity of having copy in our hands in ample time as stated above, to the end that advertisements may always receive proper classifications and be inserted in the issue for which they are intended.

MANUFACTURERS RECORD,  
BALTIMORE, MD.

Published Every Thursday



# PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

More Southern Proposal Advertising is Printed In The Manufacturers Record Than In Any Other Paper

Bids close September 16, 1918.

**TREASURY DEPARTMENT**, Supervising Architect's Office, Washington, D. C., August 22, 1918. Sealed proposals will be opened in this office at 3 P. M. September 16, 1918, for construction of 11 buildings for the United States Marine Hospital at New York, N. Y. (Stapleton). Drawings and specifications may be obtained from the Supervising Chief Engineer, Room 731, United States Custom-house, New York, N. Y., or at this office, in the discretion of the Supervising Architect, JAS. A. WETMORE, Acting Supervising Architect.

## \$30,000 6% Bonds

Notice is hereby given that the undersigned Trustees, serving as Board of Public Works, will receive bids for bonds of the City of Lakeland, Florida, in the sum of Thirty Thousand Dollars, being bonds issued to take up outstanding floating indebtedness, which said bonds bear interest at the rate of 6 per centum per annum, payable semi-annually, said bonds being in the denomination of Five Hundred Dollars each, and dated July 1, 1918, payable six each year until all shall be paid. Bids to be received on or before sixty days from this date, and the Board of Public Works hereby reserve the right to reject any or all bids and to readvertise the bonds or any portion thereof that may remain unsold.

Dated this 6th day of July, A. D. 1918.

C. M. CLAYTON,  
W. W. CHASE,  
K. T. HAYNES,  
Board of Public Works.

Bids close September 6, 1918.

## Road Improvement

Sealed bids for improvement of about 21 miles of roads in District 5 and about 14 miles in District 4, Lincoln County, Miss., will be received at the office of the Chancery Clerk, Brookhaven, Miss., until 2 P. M. Friday, September 6, 1918.

Separate proposals are required for each District. They are to be accompanied by a certified check for \$250.

For information address

C. F. SHERMAN, Engineer,  
McComb, Miss.

Bids close September 5, 1918.

## Road Improvement

Jefferson City, Mo. Sealed proposals, addressed to the County Court of Cole County, Missouri, and endorsed "Proposal for Construction (or Improving) State Road, Project No. 1," will be received by the Court until 10 o'clock A. M. on Thursday, September 5, 1918, and at that time will be publicly opened and read, at the office of the County Clerk in the Central Trust Building. The proposed work includes grading, surfacing with gravel and macadam, and constructing culverts and bridges, together with other incidental work on the State Road from Huber's Ferry, on the Osage River, to the county line west of Centertown, a distance of 26.4 miles. The surfacing is to be 9 feet in width, except for 3.9 miles, which is to be 16 feet wide. Plans and specifications are on file and may be inspected in the office of the undersigned, or at the office of the State Highway Department, Jefferson City, Mo. Proposals shall be submitted upon blank forms provided for the purpose by the undersigned, and shall be accompanied by a certified check, cash deposit, or proposal bond for thirteen thousand dollars (\$13,000). The right is reserved by the Court to reject any or all bids.

COUNTY COURT OF COLE COUNTY, MISSOURI.

By E. F. C. HARDING,

County Highway Engineer,  
Jefferson City, Missouri.

Bids close September 3, 1918.

## Street Improvement

Sealed bids will be received by the Town Council of the Town of Daytona Beach, Florida, at the Town Hall at 7:30 P. M. on September 3, 1918, for the purpose of grading and paving Seabreeze Ave. from the Halifax River to the ocean; also First Ave. from the river to Peninsula Drive, and Silver Beach Ave. from the Halifax River to Peninsula Drive; also North Atlantic Ave. from Seabreeze Ave. to Duke St. The work will comprise also installing and furnishing drainage system and required sewer pipe.

The approximate quantities are as follows:

- 14,000 square yards of pavement.
- 2,000 cubic yards of excavation.
- 8,000 lineal feet of concrete curbing.
- 2,300 lineal feet of 18-inch drain pipe.
- 1,000 lineal feet of 15-inch sewer pipe.
- 1,600 lineal feet of 12-inch sewer pipe.
- 2,000 lineal feet of 4-inch house connections.
- 15 manholes.
- 400 lineal feet of 10-inch drain pipe.
- 20 catch-basins.

Bids will be received for Brick, Asphaltic Concrete and Concrete surface construction. Any and all bids are subject to rejection. Plans and specifications are on file with the Town Clerk, R. L. Selden.

R. L. SELDEN,  
City Clerk of Daytona Beach, Florida.

## PROPOSAL ADVERTISING INFORMATION

RATE: 25 cents per line per insertion

PUBLICATION DAY: Thursday.

FORMS CLOSE 5 P. M. Tuesday. Copy received later cannot be published until issue of following week.

DAY LETTER: When too late to send copy of mail to reach us by 5 P. M. Tuesday, forward by day letter.

### THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—25 cents per line per insertion.

Bids close September 23, 1918.

## Street Paving

Sealed proposals are invited by the undersigned and will be received at the office of the City Clerk, Bristol, VIRGINIA, or at the office of the Recorder, Bristol, TENNESSEE, up to 3 P. M. September 23, 1918, for grading and construction on State Street, BRISTOL, VIRGINIA-TENNESSEE, of approximately 20,000 square yards of concrete and asphalt street, the contractor to furnish all material and labor. The street will be constructed on a well-rolled surface, then a base of 5 inches of concrete, with 1½-inch binder and 1½-inch sheet asphalt. For a more definite description specifications can be seen at the office of the Recorder, Bristol, Tennessee, or of the City Clerk, Bristol, Virginia, after September 1, 1918.

Bidders will be required to accompany their bids with a certified check of the amount of 5 per cent. of their bid as a guarantee of good faith. All bids for this work will be opened at a joint meeting of the Council of Bristol, Va., and Commissioners of Bristol, Tenn., at the City Hall, Bristol, Va., 8 o'clock P. M. September 23, 1918. The right is expressly reserved to reject any and all bids.

Also, bids are invited to be opened at the same time for approximately 5000 square yards of like paving in Bristol, Tennessee, which bids should be addressed to the Recorder, Bristol, Tennessee; also, bids are invited to be opened at the same time for approximately 6000 yards of like paving in Bristol, Virginia, which bids should be addressed to the City Clerk, Bristol, Va.

Requirements as to certified check, etc., the same as on the joint work.

August 23, 1918.

A. J. ROLLER,  
J. T. CECIL,  
Joint Committee.

Bids close September 6, 1918.

## NOTICE

### Extension of Time for Opening Bids—Bascule Bridges

The Board of Commissioners of the Port of New Orleans, 833 Canal Street, New Orleans, La., hereby announces that the date for opening bids on the Bascule Bridges, as heretofore published, has been extended from Tuesday, August 27, to Friday, September 6, at 10:30 A. M., as shown below:

Sealed proposals in duplicate will be received at the office of the Purchasing Officer, Board of Commissioners of the Port of New Orleans, 833 Canal St., New Orleans, La., not later than 10:30 A. M. on the 6th day of September, 1918, at which time they will be opened in public, for furnishing and erecting on foundations, furnished by the Board, of four double-track railway and highway Strauss Trunion Bascule Bridges at the several sites of the railway crossings of the Inner Harbor-Navigation Canal of the Greater Port of New Orleans.

Form of proposals, specifications and drawings and all necessary detailed information can be obtained at the offices of George W. Goethals & Company, Inc., 40 Wall Street, New York City, and at the offices of the Board of Commissioners of the Port of New Orleans, 833 Canal Street, New Orleans, La.

A deposit of twenty dollars will be required upon the issuance of plans and specifications, which sum will be refunded on their return in good condition within ten days after the award of this contract.

The Board reserves the right to accept or reject any or all bids.

JOHN R. LOOMIS,  
Purchasing Officer,  
833 Canal Street,  
New Orleans, La.

Bids close September 2, 1918.

## Water-Works System

Sealed proposals will be received by the Board of Public Works of Liberty, S. C., until noon September 2, 1918, for furnishing all material and machinery and the construction of a water-works system in and for the town of Liberty, S. C.

Plans and specifications may be seen at the office of the Chairman of the Board.

Certified check for 5 per cent. of amount bid will be required with each bid.

The right is reserved to reject any or all bids.

BOARD OF PUBLIC WORKS,  
By J. F. BANISTER,  
Chairman.

Bids close September 5, 1918.

## Meat Packing Plant

The State Packing Co., Raleigh, N. C., will let contract for meat-packing plant construction September 5. Those wishing plans will get in touch with

C. L. BROOKS ENGINEERING CO.,  
Moultrie, Ga.

Bids close September 6, 1918.

## NOTICE

### Extension of Time for Opening Bids—Lock Gates

The Board of Commissioners of the Port of New Orleans, 833 Canal Street, New Orleans, La., hereby announces that the date for opening bids on the Lock Gates, as heretofore published, has been extended from Tuesday, August 27, to Friday, September 6, at 10:30 A. M., as shown below:

Sealed proposals in duplicate will be received at the office of the Purchasing Officer, Board of Commissioners of the Port of New Orleans, 833 Canal Street, New Orleans, La., not later than 10:30 A. M. on the 6th day of September, 1918, at which time they will be opened in public, for furnishing and erecting on foundations furnished by the Board, of certain lock gates and fixed parts which are required for the ship lock being constructed at the entrance to the Inner Harbor of the Greater Port of New Orleans.

Form of proposals, specifications and drawings and all necessary detailed information can be obtained at the offices of George W. Goethals & Company, Inc., 40 Wall Street, New York City, and at the offices of the Board of Commissioners of the Port of New Orleans, 833 Canal Street, New Orleans, La. A deposit of twenty dollars will be required upon issuance of plans and specifications, which sum will be refunded on their return in good condition within ten days after the award of the contract.

The Board reserves the right to accept or reject any or all bids.

JOHN R. LOOMIS,  
Purchasing Officer,  
833 Canal Street,  
New Orleans, La.

Bids close September 14, 1918.

## Drainage Canals

Sealed proposals for the construction of drainage canals at Foreston and Greeleyville, S. C., will be received September 14, 1918, at the office of Mallard Lumber Co., Greeleyville, S. C. There are approximately 15 miles of canal and 173,000 yards of excavation. Work to be completed within 18 months. Plans and specifications furnished upon receipt of \$2.

BOARD OF DRAINAGE COMMISSIONERS OF CLARENDON COUNTY  
DRAINAGE DISTRICT NO. 3,  
Greeleyville, S. C.

"ADVERTISING values should not be measured simply from the standpoint of getting immediate orders, but in a bigger and broader sense from the standpoint of business building for the future.

"Now is the time for creative advertising—advertising of a creative, educational nature will prove a measure of sound insurance and preparedness for bigger and better future markets. Moreover, this is the time to plan and look forward to organizing and building up defenses against the severe competition which is bound to come, and impressive, educational advertising will prove a powerful factor to this end."

# Machinery, Equipment and Supplies WANTED

## WANTED ELECTRIC MOTORS

SECOND HAND WILL PAY BIG PRICES  
ALTERNATING and DIRECT CURRENT from 1/4 to 500 Horse Power,  
1-2-3 phase ALTERNATING and 220 Volt DIRECT CURRENT

What Have You To Offer?

Send list with prices. Quick Action. If interested will mail check.

**MONARCH ELEC. MOTOR CO.**

Morris Benjamin, Pres.

212 Centre St.

NEW YORK CITY

## WANTED

- PIPE - - - 3" to 10"
- RAILS - - - 12 lbs. to 35 lbs.
- FLUES - - - 3" to 4"
- TANKS - - - any size

If you wish to buy or sell,  
communicate with us.

**Keystone Pipe & Supply Co.**

BUTLER, PA.

## WANTED

300 H. P. Water Tube and Horizontal Return Tubular Boilers, high pressure; two 3 gauge Saddle-Tank Locomotives; two Tractor Shovels; lot 1/2 and 3/4 Steel Wire Ropes, long lengths. Will buy plants of any description.

E. M. CO.

602 Drake Bldg. EASTON, PENNA

## WANTED AT ONCE SECOND-HAND TANK AND TOWER

Tank 50 to 100,000 gal. capacity  
**MARLBORO COTTON MILLS**  
McCOLL, S. C.

## STEAM SHOVEL Wanted

One second-hand steam shovel, either one-half or five-eighths-yard dipper. Give detailed description, location for personal inspection and lowest cash price. Columbia Clay Co., Uhrichsville, Ohio.

**COLUMBIA CLAY COMPANY**  
Uhrichsville, Ohio

## WANTED

### Hoisting Engine and Pumping Outfit

To buy a Hoisting Engine and Pumping Outfit with kerosene engine attachment, also same with steam engine attached, H. P. of each to be 10 to 15.

**GEORGE TALC CO.**  
ASHEVILLE, N. C.

## WANTED

1000 tons of 60-lb. Relaying Rails, for Southern delivery. Prompt shipment essential.

**The Isaac Joseph Iron Co.**  
525 Reading Road Cincinnati, O

## WANTED

Good used Steel Storage and Pressure Tanks, also wood tanks, all descriptions. Give detailed description and price in first letter.

**NATIONAL PRODUCTS CO.**  
EAST LIVERPOOL, OHIO

## WANTED

A first-class second-hand Water-Tube Boiler, about 250 H. P.; Heine type preferred. Address all particulars to the

**Memphis Furniture Mfg. Co.**  
MEMPHIS, TENN.

## Wanted to Buy

### Two Duplex Steam Pumps

To be used in connection with pressure filters for a supply of fresh water. These pumps must have a maximum discharge pressure of 150 lbs., with a capacity of 350 gals per minute at that pressure, with an available steam pressure of 90 lbs. Address, giving complete description, price, etc., etc.,

**GEO. F. ADAMS, Manager**

Hotel Chamberlin Fort Monroe, Va.

## WANTED

### Second-Hand Pumping Plant

for irrigation purposes. One 36-inch Centrifugal Double-Suction Pump, lift 20 to 25 feet; 1 400 H. P. Corliss Engine; 2 200 H. P. Water-Tube Boilers. Complete plant preferred, but solicit description and quotations on single items.

Address Box 877 Lake Charles, La

## WANTED

### Second-Hand Fire Pump

that is in first-class condition to handle 1500 gal. per minute. Steam or motor-driven. Pressure 75 lbs. against head.

**Continental Car Co. of America**  
Louisville, Ky.

## Wanted Air Compressors

One single or double stage, motor or belt driven, to furnish 300 to 500 cu. ft. of free air per minute at 100 lbs. pressure. State price, length of service, name of manufacturer, delivery promise, and where inspection can be made.

**PULASKI FOUNDRY & MFG. CORP.**  
PULASKI, VA.

## WANTED

### 40 to 50 tons ICE MAKING APPARATUS

To arrange for raw water and electric drive. Only a standard make considered.

Address  
**A-4, care of Manufacturers Record**  
BALTIMORE, MD.

## BOILERS

WANTED—Battery of Water-Tube or Return Tubular Boilers, total 1200 H. P. Separate units considered. Give pressure, age, make, price.

Box B Z, care of Manufacturers Record

## WANTED

### SECOND-HAND BOILER

Internal fire, locomotive type or Scotch Marine, 100 to 150 H. P. Stand test of 110 minimum pressure.

**HENRY LOEB & COMPANY**  
MEMPHIS, TENN.

## IF YOU WANT

To get in touch with some Extra Contract Work

ADVERTISE IN THE  
**Southern Shops Seeking Contract Work**  
Department

RATES ON APPLICATION.  
**Manufacturers Record** Baltimore, Md.

## WANTED Second Hand Boilers

One 350 to 400 H. P., two 225 to 250 H. P., one 300 to 325 H. P. Boilers of either Heine or B. & W. wrought header type, good for not less than 150 lbs. working pressure. In reply quote boilers f. o. b. cars shipping point. Give floor space and height required for installing boilers and size, length and number of tubes.

**Atlantic Ice & Coal Corp.**  
ATLANTA, GA.

## WANTED

**CRANE** equipped for handling clam shell bucket; with power but without boiler. **HOISTING ENGINE**, single drum, without boiler, to lift about 4500 pounds at 100 feet per minute on single line.

**PENSACOLA TAR & TURPENTINE COMPANY**  
GULL POINT, FLA.

## WANTED

**Second-hand Compressors**  
Air Compressors, motor driven or belted; air pressure 100 to 150 lbs.; capacity anywhere from 500 to 1000 cubic feet per minute. Send complete specification and place where inspection can be made.

**HOLSOM COMPANY**  
18 Broadway NEW YORK

## WANTED Electric Traveling Cranes

5-ton, 40 to 50' span.  
10-ton, 40 to 50' span.  
3 motor type, 220-volt, D. C., or would consider alternating-current cranes.

## MONORAIL HOISTS

5-ton Monorail Hoists, motor-driven travel, cage operated, 3 phase, 60-cycle, 220-volt.

## STEAM SHOVELS

Erie type "B" Steam Shovel.  
Bucyrus 70-C Steam Shovel.

Address  
Box A-1 care Manufacturers Record

## WANTED

Discarded Canvas or Rubber Belt  
18 to 24 inches.

Can be used if considerably worn.  
**VALLEY FORGE & MINING CO.**  
BRISTOL TENN

## WANTED

We are in the market for a small second-hand Ice Plant, in good condition, ten to twenty-five tons capacity, to operate in connection with our sawmill plant here.

**D. W. Alderman & Sons Company**  
ALCOLU, S. C.

# Here is Your Chance to Injure the Kaiser

The Kaiser is now planning  
to seize the trade of the world  
for Germany. You can do  
much to defeat him if you  
will pledge yourself not  
to buy German-made goods.

## Don't Thoughtlessly Help the Kaiser to Kill Americans

A part of every dollar you spend for German-made goods goes into the Kaiser's war chest. Buy American-made goods, or the goods of our heroic Allies. German goods are blood-stained. Sign the pledge below, and mail it now.

Please enroll me as a member of the Boycott Committee.  
I enclose my check for \$1.00—Annual Membership.

\$5.00—Sustaining Membership; \$10.00—Subscribing Membership;  
\$25.00—Contributing Membership; \$100.00—Life Membership.

Make check payable to the order of Robert Appleton, Treasurer.

## AMERICAN DEFENSE SOCIETY

**HONORARY PRESIDENT**  
HON. THEODORE ROOSEVELT.  
Ex-President of the United States

**HONORARY VICE-PRESIDENTS**  
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CHAS. S. FAIRCHILD,  
Ex-Secretary U. S. Treasury

## EXECUTIVE OFFICERS

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**AMERICAN DEFENSE SOCIETY, Inc.**  
44 East 23rd Street, New York

**T**HAT I may not directly contribute financial aid to the German military policy with its disregard of international law, its attacks on unfortified towns, its use of poison gas and flames, its ignoring the Red Cross badge, its bombing hospitals and its torpedoing defenseless merchant ships, I pledge myself never knowingly to buy any article made in Germany.

Name \_\_\_\_\_

Address \_\_\_\_\_



## Special Advertisements of General Interest.

### French Business

To the Iron and Steel Trades—

Do you want to collaborate with French Industries?  
Do you want to increase your export business?  
Do you want a representative in France?  
Do you want representation at the next Lyon's Fair?  
If so, address

**Monsieur Marius Merlin**

**49 Rue de la Republique - - - Lyon, France**  
Commission Agency—Technical and Commercial Services.

### FOUNDRY and MACHINE SHOP FOR SALE

With old-established trade covering several States and manufacturing machinery and castings classed as "Governmental Purposes". Plenty of orders on hand and prepared for doing Government work. In one of the best cities in the South. Address

**Box A 3, care Manufacturers Record, Baltimore, Md.**

### SALE AT PUBLIC AUCTION OF THE PROPERTY, ETC OF THE CHAMPION LUMBER COMPANY on September 23, 1918

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE  
WESTERN DISTRICT OF NORTH CAROLINA.  
IN EQUITY.

THE PROVIDENT LIFE & TRUST COMPANY OF PHILADELPHIA, a corporation created by and existing under the laws of the State of Pennsylvania, and a citizen of said State, and JOHN WAY, a citizen of the State of Pennsylvania, vs.  
CHAMPION LUMBER COMPANY, a corporation created by and existing under the laws of the State of Delaware, and a citizen of said State, and JAMES G. CAMPBELL, Trustee in Bankruptcy of said Company.

NOTICE OF  
COMMISSIONERS'  
SALE:

By virtue of a decree of the District Court of the United States for the Western District of North Carolina, entered at Asheville on August 19, the undersigned, A. B. KIMBALL and HENRY B. STEVENS, the commissioners therein appointed, will sell as an entirety, at public auction, to the highest and best bidder, at the Courthouse door, in the Town of Waynesville, County of Haywood, State of North Carolina, on Monday, the 23d day of September, 1918, at twelve o'clock noon, the property, assets and effects of Champion Lumber Company, conveyed by two deeds of trust, executed by said Company to Provident Life & Trust Company of Philadelphia and John Way, Trustees, and recorded in the office of the Register of Deeds for Haywood County, in Book "L," page 521, et seq., and in Record of Deeds "S," page 521, et seq., together with additions thereto, less deductions for use, wear and tear, or as previously disposed of, under orders of the Court, and consisting of some Ninety Thousand (90,000) acres of timber lands, situate in the County of Haywood, State of North Carolina, particularly described by metes and bounds in said deeds of trust, on which are situate and are in daily operation two large, modern band sawmill plants, each of a daily rated capacity of One Hundred and Fifty Thousand (150,000) feet, together with all mills, houses, buildings, structures, railways, tramways, logging roads, cars, engines, machinery and apparatus, and some Thirteen Million (13,000,000) feet of manufactured lumber, on the yards of said sawmills at Sunburst, N. C., and Crestmont, N. C., including all logs felled in the woods on date of sale, or at slides or loading points or along railways or in pond, at the respective mills, including two stocks of goods, usually inventorying from Thirty Thousand Dollars (\$30,000.00) to Forty Thousand Dollars (\$40,000.00), situate at Sunburst and Crestmont, respectively, as well as numerous items of personal property, consisting of horses, feed, harness, hardware, shops, repair parts, extra parts, a complete and elaborate box manufacturing plant at Sunburst, tools, steam shovel, picks, contractors' equipment, surplus supplies of bolts, nuts, saws, pulleys, belts, etc., as per inventory, which may be inspected on application to R. G. Rogers and H. A. Cleaver, receivers, Sunburst, N. C.

There is laid on the property some thirty-five (35) miles of logging railway and two (2) miles of standard railway, which will be included in the sale.

Also all notes, bills and accounts receivable, as well as all contracts now existing between the receivers and others for the purchase and delivery of manufactured lumber, as well as such contracts as the receivers may make in the operation of the property, pending the termination of the receivership, which said contracts the purchasers will be required to assume and perform.

All the above described real estate, property, plants, machinery, fixtures, appurtenances, appliances, railways, and every part thereof, will be offered as an entirety and as a going concern, including all property acquired by the receivers, or either of them, since their appointment, except such as has been sold or used or surrendered or conveyed by them under orders of the Court.

The purchasers will be required to assume all uncompleted contracts of the receivers, and pay off and discharge all tort and contract liabilities, whether now asserted and known of, or whether not now known of, but hereafter asserted, and whether originating prior to or since the receivership.

The total amount of claims, unsettled and undisposed of, so far as brought to the knowledge of receivers or of counsel, does not exceed the sum of Twenty-five Thousand Dollars (\$25,000.00); and an inventory of lumber on hand as of August 1, 1918, will be on file in the office of the Clerk of the United States Court at Asheville, N. C., and at Greensboro, N. C., where the same may be consulted.

Further information may be had on application to Henry B. Stevens, Commissioner, Asheville, N. C., or A. B. Kimball, Commissioner, care King & Kimball, Greensboro, N. C.

Detailed information as to terms of sale will be supplied by the commissioners on application, and further reference is had to decree of sale, on file at Asheville, N. C., and to more formal advertisement, including detailed terms of sale, now appearing in the "Mountaineer Courier," published at Waynesville, N. C.

The commissioners will accept no bid from any bidder who shall not have deposited with the commissioners, as a pledge that he will make good his bid, in case of its acceptance, the sum of One Hundred and Twenty-five Thousand Dollars (\$125,000.00), in cash, or by certified check of a National Bank in good standing and having a capital stock of at least One Hundred Thousand Dollars (\$100,000.00). Such deposit of any unsuccessful bidder will be returned to him when the property is sold and confirmed to the purchaser. The deposit received from the successful bidder will be applied on account of his bid.

Sale subject to confirmation of the Court.

This August 10, 1918.

A. B. KIMBALL,  
Commissioner.  
HENRY B. STEVENS,  
Commissioner.

MORGAN, LEWIS & BOCKIUS,  
354 Land Title Building,  
Philadelphia, Pa.

### Manufacturing Machine Shop FOR SALE

Pursuant to an order of the Court of Common Pleas of Franklin County, Ohio, the undersigned will sell at private sale all the Machinery, Tools, Patterns, Plans, of Material, Office Furniture and Good-Will of The Owen T. Snyder Co., Lynn and Ludlow Sts., Columbus, Ohio. The plant is now in operation, producing Automobile Newspaper Lifts, Plate Droppers, Freight Elevators, Dumbwaiters, Capital Guide Lubricators, and doing a general jobbing business. If interested, communicate with the undersigned at the above address.

**WM. R. EDMISTER, Receiver**

### The Clinton Construction Co. 309 Massachusetts Bldg. Kansas City, Mo.

Is in the field to buy, reorganize or finance the building of Small Electric Railways, especially short steam lines, not paying, that can be changed to paying electric lines. The company is now building two electric lines, and desires to purchase rails and such other supplies as can be used in such construction. Those having anything to sell will please offer to the company.

**WILLARD E. WINNER**  
PRESIDENT

**FOR SALE AT GREAT SACRIFICE**  
Two manufacturing plants—one at Buffalo, New York, and one at Racine, Wisconsin, each containing about 150,000 sq. ft. of floor space. Adaptable for wood or iron work. Fully equipped with sprinklers, steam power, wood and iron-working machines. Racine plant has large foundry fully equipped. Can give immediate possession. If interested, communicate with

**M. H. MURPHY**  
Manitowoc, Wisc.

### GOOD FACTORY SITE FOR SALE

Good site for Factory, Knitting or Woolen Mills, in city of 3000. New two-story brick, 150 by 75; on tracks of L. & N. R. R. Co. Center of coal-mining section. Water and Natural Gas in abundance. Will sell at attractive figure. Write

**J. B. SNYDER**  
WILLIAMSBURG, KENTUCKY

### COMPLETE ICE PLANT FOR SALE

Ten-ton, steam-driven Distilled Water Ice Plant; complete. Right price to right party. Location, Southern Texas. Good railroad facilities. City now planning electric-light and water systems. Would make fine combination. Address

**F. C. care Manufacturers Record, Baltimore, Md.**

### SECOND-HAND BAGS FOR SALE

75,000 first-class second-hand bags. Offer same for 15c apiece f. o. b. Roanoke, Va. Write or wire. Will be sold immediately.

**Roanoke Scrap Iron & Metal Co.**  
Box 611 Roanoke, Va.

### PROVEN Sulphur Land

**For Sale—1000 acres proven sulphur land, on railroad and in oil belt, adjoining Standard Sulphur holdings. \$250 per acre. Will sell all or part. Terms.**

**B. T. Biggs, Pecos, Tex.**

### Stainless Steel

A steel which will not corrode or rust, created by patents owned by the

**AMERICAN STAINLESS STEEL CO.**  
1541 Oliver Bldg., Pittsburgh, Pa.

Original Licensees:  
Firth-Sterling Steel Co.  
Crucible Steel Co. of America.  
Carpenter Steel Co.  
Bethlehem Steel Co.  
Washington Steel & Ordnance Co.  
Haynes & Son.

### BRASS FOUNDRY FOR SALE

Well equipped machine shop and building. Apply to

**R. L. CORR**  
600 West Rosedale St. FT. WORTH, TEX.

### We Make a Specialty of Dismantling

Old plants of every description, such as saw mills, electric-light plants, etc. Our men are spot cash. Advise us what you have to offer.

**THE PIEDMONT IRON & METAL CO.**  
BALTIMORE, MD.

## ADVERTISERS

The Manufacturers Record is published every THURSDAY.

Copy not requiring proof submitted should reach us one week in advance, and two weeks in advance when proof is required.

We desire to use, as far as possible, uniform type for display and to avoid the use of black background cuts. The uniform border is two-point plain rule for all spaces less than a full page.

Copy for advertisements should be prepared for two-column (4½ inches wide), or four-column measure (9 inches wide). Co-operation on these details will work to the advantage of both the advertiser and the Manufacturers Record.

## FOR SALE—Steel Fire Proof Mill

Sawmill building and the 9 ft. Clark Bros. band mill complete, contained therein.

This is the plant of the AVOYELLES CYP. CO., LTD., which is practically as good as new; that is to say, band mill Corliss engine, return tubular Dutch oven boilers are estimated at 90% as good as new, balance of outfit from 75% to 90%. This was the most efficient single band mill that was ever operated, in mixed cypress and hardwood, in this State, having cut as much as 65 M ft. of boards on 11-hour run.

The steel mill frame is of bolted construction and can be easily disconnected, loaded on cars and subsequently re-erected by contractors of the American Bridge Co. who furnished us same, at a cost of about \$4,000.00.

We have one set of complete detailed specifications covering the entire plant, which consists in general of about the following:

Fireproof steel mill building, extra heavy Pacific Coast type; 9 ft. Clark Bros. band mill, weight 35,000 lbs. (will split a log 66" in diameter through the center).

Three block 58" wrought steel log carriage, extra heavy Pacific Coast type with 12"x36" direct steam feed. Prescott Steam Set Works.

Six saw, 51" edger.

One—eight saw under cut trimmer.

Four saw slasher.

Complete shingle and lath mill.

10"x12"x72" steam nigger.

One No. 1 1/2 Diamond hog.

New Allis-Chalmers log haul up rig.

One Clark automatic Corliss engine 22x24, heavy duty type, developing 530 horsepower.

Three steel case Dutch oven, return tubular boilers, 150 horsepower each, Houston, Stanwood & Gamble makes.

Extra heavy shafting, live rolls, chains, belt, etc.

The mill is belted up complete ready to run.

Here is an extra fine plant that can be moved from its present location in Winn Parish, Louisiana, re-erected and started to running within thirty days.

The mill frame itself will practically never wear out.

We are asking approximately \$50,000.00 for the entire outfit.

The mill building alone cost us over \$15,000.00 when iron was cheap.

We will have for sale and delivery in the early Fall about 19,000 lin.

ft. of 35-lb. rail, and about 39,000 lin. ft. 45-lb. rail, along with two 18-ton

and one 28-ton Forney Type Davenport Rod Locomotives. Four Lidger-

wood Skidders. Large number of log and sawdust cars. A complete

double-band sawmill at present in operation.

If interested, address

**Ascension Red Cypress Co., Ltd.,**

Whitney-Central Building

New Orleans, La.

## For Sale

(PROMPT DELIVERY)

## SIX STEEL BRIDGES

**Bridge No. 1**—100' through truss span; height, 10' 6", C to C chords; width, 15' 8"; six panels of 16' 8" in length each; weight per lineal foot, 1,057.18 lbs., or total weight, 105,718.

**Bridge No. 2**—100' four curve pony spans; height, 10' 6", C to C chords; width, 17' 10", C to C of trusses; length, six spans of 16' 8" each; total weight of bridge, 127,035.

**Bridge No. 3**—100' through truss; height, 10' 6", C to C chords; width, 17' 10", C to C of trusses; length six panels of 16' 8" each; total weight of bridge, 118,316.

**Bridge No. 4**—100' through truss; height, 10' 6", C to C chords; width, 17' 10", C to C of trusses; six panels 16' 8" each in length; total weight, 118,316.

**Bridge No. 5**—100' through truss span; height, 10' 6", C to C chords; width, 15' 8", C to C of trusses; length, six panels of 16' 8" each; total weight, 113,882.

**Bridge No. 6**—100' through truss span; height, 10' 6", C to C of chords; width, 17' 10", C to C of truss length; six panels of 16' 8" each; total weight, 125,712.

These bridges built by the Wisconsin Bridge & Iron Co., Milwaukee, Wis.; steel furnished by the Illinois Steel Co., Medium, O. H. Steel; specifications, Cooper's E 35. Bridges inspected and tested by the Pittsburgh Testing Laboratory, Limited, of Pittsburgh, Pa., and all laboratory tests and characteristic reports are on file in Kansas City in support of bridge details and specifications. Bridges set in place during 1904 and 1905. Kept well painted and no deterioration whatever shows on these bridges and the tonnage hauled, of an average of about 150, has been sufficient to show the least particle of strain on these bridges.

**SONKEN-GALAMBA IRON & METAL CO.**

Armour Station, Kansas City, U. S. A.

WRITE, PHONE OR WIRE US

## Bargains in Machinery and Supplies.

### CORLISS ENGINES

1-12"x24" "Rollins"

1-18"x32" "Naylor"

1-24"x56" "Watts-Campbell"

Also a large stock of slide valve engines, automatic engines, air compressors, pumps, boilers, etc.

**L. F. SEYFERT'S SONS, Inc.**

437 N. 3rd Street

Philadelphia

## FOR SALE Broomless Floor Sweeper

Complete with extra battery—1917 Model No. 2 made by William Firth. Used only few weeks. Perfect condition. Bargain for quick sale.

**JUDSON MILLS**

Greenville, S. C.

## FOR SALE

One Complete Nickel-Plating Plant.

190,000 ft. 1 1/4" 20-Gauge Welded Steel Tubing.

30,000 lbs. 5/16 20-Gauge Seamless Fully Annealed Brass Tubing.

25,000 ft. 5/8 Hex. Cold Roll Machine Screw.

10,000 5" Copper Discs.

**MOTOR COOLING SYSTEMS CO.**

BALTIMORE, MD.

### BOILER FOR SALE

Helme Water Tube Boiler in perfect condition. Size of boiler 330 H. P. on 10 sq. ft. rating. Heating surface 330 sq. ft. One shell 48" diameter, 31' 9" long. Thickness of shell plate 3/4", heads 5/8". Longitudinal seams, double-strapped butt joints. Water leg plates 1/2". Tubes 3/4" diameter, 15" long, 189 in number.

Maryland Casualty Company inspection. Boiler originally designed for 180 lbs. working pressure.

Price \$22 per H. P. f. o. b. cars East St. Louis, Ill.

**MONSANTO CHEMICAL WORKS**  
1800 S. Second St. St. Louis, Mo.

## FOR SALE

6x15" Woods Fast Feed Planer and Matcher, fully equipped, almost new.

60-ton Forney type Locomotive, 17x24" cylinders, in good condition; quick delivery.

26x48" Watts-Campbell Corliss Engine, with 18" flywheel; first-class condition.

Write or wire

**BOX 574**

SAVANNAH,

GEORGIA

## FOR SALE MISCELLANEOUS

(1) 240 K. W., 2200-volt, 60-cycle, 2-phase, G. E. Generator, direct connected to Harrisburg side-crank, tandem-compound, 200 H. P. M. engine; 600-square-foot surface condenser, air and circulating pumps.

(1) 400 horse-power, tandem-compound, heavy-duty Corliss Engine, 16-foot flywheel, size 16"x30"x42", total weight 94,000 lbs.

(1) 10 K. W., 2200-volt primary, 110-220 secondary tested Transformer, 60-cycle.

(1) 2 K. W., 2200-volt primary, 110-220 secondary tested Transformer, 60-cycle.

(1) complete, slightly-used Laundry Machinery Plant, 24"x48" washer, 30" centrifugal extractor, flat roll ironer, 2 cabinet dry-rooms, etc., suitable for hotel or public institution.

(2) 72"x18" 150 H. P. Horiz. Tub. Boilers, Dutch oven, butt strap, 150 lbs. pressure, complete, all fittings.

Immediate delivery. Subject previous sale. Address

**W. R. JENNISON**

407 Bisbee Bldg. Jacksonville, Fla.

## FOR SALE

Two—66" x 16' Schofield R. T. triple-riveted butt-strap boilers with Dutch ovens or half arch front settings; complete with smokestacks and usual fittings; good for 110 lbs. steam pressure. Can be inspected here; immediate shipment.

**MALSBY MACHINERY CO.**

408-10 E. Bay St., Jacksonville, Florida

## Air Compressors (Steam Driven)

1—24"x24"x30" "Rand," Class RC straight-line, capacity 1300 cu. ft.

1—16"x18 1/4"x18" "Ingersoll - Rand," Class A straightline, capacity 620 cu. ft.

1—16"x18"x11"x16" "Sullivan" Compound, type WB-2, capacity 706 cu. ft.

Also a large assortment of both Belt and Steam-driven Compressors, smaller sizes. Write for complete list.

**L. F. SEYFERT'S SONS, Inc.**

437 N. 3d Street

Philadelphia

## Wanted -- For Sale

Steel Buildings.  
Electric, Air and Hand Hoists.  
Cranes, Electric and Hand.  
Blowers, Exhausters, Compressors.  
Brass-Melting Furnaces.  
Foundry Equipment, Cupolas.  
New and used.  
We buy and sell.

**THE CLIFTON-PRATT CO.**

CINCINNATI, O.



## Pumping Outfit

- 1—Corliss Engine driven Worthing Duplex Pump, capacity half million gallons.
- 1—Wetherill Corliss Engine, 12"x24"; cheap before removal.

**JOHN M. GREENE**

261 Drexel Bldg.

PHILADELPHIA

PA

## STEEL TANKS

- 1—54" diam. x 19'0".  
1—36" diam. x 30'0".  
1—36" diam. x 28'6".  
1—60" diam. x 30'0".

**HENRY POTTS & COMPANY**

650 Real Estate Trust Building

PHILA.

## FOR SALE

### Second-Hand Pipe

Cut and threaded to any desired length. Pipe for steam, water, irrigation or other purpose. Write for prices. We can positively save you money. Your orders solicited. We are always in the market for scrap iron, metals, etc.

**B CASSELL & COMPANY**

Chattanooga

Tenn.

## MACHINERY FOR SALE

- 1—Wheeland Circular Saw Mill; complete; capacity 20,000 feet per day.  
1—35 H. P. Center Crank Wheeland Engine.  
1—25 H. P. Byers Log Loader and Skidder.  
1—13-ton Class A Climax Locomotive.

**H. P. WYMAN LUMBER CO.**

BRISTOL, VA.

## STEARNS 8 FT. BAND MILL

### FOR SALE

With Power Plant, Filing-Room Machinery and full equipment. Immediate possession. Full description on request.

**CLEAR FORK LUMBER COMPANY**  
UNICOI, TENN.

## FOR SALE

### FIRST CLASS

### Used Machinery

Logging, Railroad, Sawmill, Planing Mill, Cableway, Power Plant, Yard, Fire Protection Engineering and Barn Machinery and Equipment, including following and many other items:  
**BOILERS**—Battery of four 100 H. P. Boilers, with stack.  
**CABLEWAY ENGINE**—Lidgerwood 12x12 Cableway Engine, with steel tower.  
**DRY KILNS**—Complete two-room dry kilns.  
**DRAG SAW**—Hill No. 7 Steam Drag Saw, with steam hoist.  
**FOUNDRY**—Whiting No. 2½ Cupola and Complete Foundry Equipment.  
**GRINDER**—Covel No. 90 Band Saw Grinder, with filing clamp.  
**LOG JACKER**—Extra heavy Spur and Bevel Gear Drive.  
**LOG TURNER**—Overhead.  
**MOLDER**—Woods No. 107 Inside Molder.  
**PLANNER AND MATCHER**—American No. 229 Planer and Matcher.  
**PREPARATOR**—Kraetzer Steel Cylinder Preparator.  
**RESAW**—Six-foot Diamond Horizontal Resaw.  
**SHINGLE MACHINE**—Challoner 10-Block Shingle Machine.  
**SPRINKLER**—Grinnell Automatic Sprinkler System complete.

If interested, write for complete booklet and prices covering many other items.

**Santee River Cypress Lumber Co.**

FERGUSON, S. C.

## WROUGHT IRON PIPE

Thoroughly overhauled, with new threads and couplings. Guaranteed to give entire satisfaction. Pipe cut to sketch. It will pay to correspond with us.

**Albert & Davidson, Inc.**

Oakland and Kent Sts.  
Brooklyn, N. Y.

## STEEL STORAGE TANKS

We are still in a position to make almost immediate shipment of 1000, 3000, 5000, 7500, 8000, 9000, 10,000, 12,000, 15,000 and 20,000-gallon Tanks, as we have the stock on hand at the mill.

### SPECIAL: 32 STEEL TANKS

capacity 4200 gallons, 8' 8" dia. x 9' 6" high, 3/16" shell, 3/16" heads, with manhole and four 2" pipe flanges.

We can also offer prompt shipment on Tanks built to your specifications.

### STANDARD TANK CO.

15 Park Row New York, N. Y.

## First-Class Used Machinery

For Every Conceivable Kind of

**BORING MACHINES**  
**DRILLS**  
**GEAR CUTTERS**  
**HAMMERS**  
**LATHES**  
**MILLERS**  
**PLANERS**  
**SHAPERS**  
**SAWS**  
**SHEARS**  
**TURRENT LATHES, Etc.**

CONSULT

**HENRY PRENTISS & CO., Inc.**  
NEW YORK, N. Y.

## Delivery Now

30"x12" Patent Head Lodge & Shipley Engine Lathe and Countershaft.

16"x6" Marvel Head Lodge & Shipley Engine Lathe.

Landis 10"x30" Plain Grinder, with Universal Headstock.

Two Brown & Sharpe No. 3 26" Automatic Gear Cutters.

Ingle Automatic Gear Tooth Chamfering Machine.

24" Cincinnati High-Speed Shaft-Driven, Up-right Drill, with Gear Box and Tapping Attachment.

Universal Swivel Table for Radial Drill.

No. 1 Diamond Bench Grinder on pedestal.

Dry Grinder for two 12" wheels.

Heald Style "C" Drill Grinder.

One 24" Rockford Wet Tool Grinder.

Globe Tool Sharpener.

Triplex Single-Acting Vertical Dean Pump, 4½" bore, 4" stroke.

36"x36"x24" L. W. Pond Planer. Two heads on cross rail.

One 30"x12" Patent Head Lodge & Shipley Lathe and Countershaft.

**The Lodge & Shipley Machine Tool Co.**

Cincinnati, Ohio

## Saw Mill Machinery For Sale

Large stock Engines, Boilers and all kinds of Saw Mill Machinery, including Shingle, Lathe and Planing Mill Machinery, Filing Room Equipment, Machine Tools, Railroad Equipment, etc.

**HARTFELDER-GARBUTT MACHINERY COMPANY**

EQUIPMENT AND SUPPLIES FOR  
MILLS AND RAILROADS

SAVANNAH,

GEORGIA

## Tubing all Sizes

## Pipe cut to sketch

## SECOND HAND PIPE

Large stock, all sizes, furnished with new threads and couplings

**JAMES F. GRIFFITH**

416-24 Moyer St.

Philadelphia, Pa.

MENTION MANUFACTURERS RECORD WHEN YOU WRITE

## IRON AND STEEL PIPE WIRE AND MANILA ROPE MALLEABLE AND CAST FITTINGS

Large stock of good sound SECOND HAND pipe in long straight lengths. No rust pits or eaten places; couplings and threads perfect

Largest stock of NEW pipe in the Middle West

OHIO PIPE CO., Works and Yards, FINDLAY, OHIO

## FOR SALE PIPE

Second-Hand  
All Sizes, ½" to 24"

Furnished with new threads and couplings, suitable for every practical purpose.

Also large assortment of Contractors' Equipment, Hoisting Engines, Boilers, Concrete Mixers, etc.; all thoroughly overhauled.

## Marine Metal & Supply Co.

167 South St. NEW YORK

## SECOND HAND BRICK MACHINERY

FOR SALE—Cheap for Cash

f. o. b. cars Slidell, La., Second-Hand Brick Machinery; Chambers No. 8 Pug Mill, Brick Machine, Automatic Cutter, all good condition. Address

**SOUTHERN CREOSOTING CO., Ltd.**  
Slidell, La.

## BRICK MACHINERY FOR SALE

All in fine condition and will be sold very reasonable to quick buyer.

Chambers Bros. Co., 9-ft. Dry Pan, with elevator and bucket, complete, with shafting, pulleys and all connections. Chambers Brick, Type S., capacity 1000 per hour, complete, with off-bear table and belt 135 ft.

1—steel J. C. Steel Table Brick Cutter, with all connections.

1—Chambers 10-ft., 2-roll Pug Mill.

1—Chambers 10-ft., 1-roll Disintegrator.

1—J. C. Steel 8-ft., single-roll Pug Mill; new.

1—pair J. C. Steel Rolls.

1—American single-roll Pug Mill, 10 ft., with frame.

Approximately 30 tons 12-pound Rail; also approximately 100 tons 16 and 20-pound Rail, all in fine condition. This is the complete plant, with everything to conduct a good yard, and will be sold at a bargain.

## SABEL & ROTHCHILD

770 W. Bay St Jacksonville, Fla.

## FOR SALE

One 30-ton and one 60-ton Frick Compressors, direct connected to steam engines. Complete 40-ton Ice Factory in two units. Distilling system for water. Water Pumps, Boilers, etc. Now in operation. Must sell at once. Come and look it over. A Bargain.

**BANFIELD ICE COMPANY**  
SPRINGFIELD MISSOURI

## PIPE ALL SIZES and New; IMMEDIATE DELIVERIES

- 8,000' of 12" pipe.  
10,000' of 8" pipe.  
10,000' of 6" pipe.  
10,000' of 4" pipe.  
15,000' of 3" pipe.  
50,000' of 2" pipe.  
50,000' of 1½" pipe.  
100,000' of 1¼" pipe.  
100,000' of 1" pipe.  
Also, a large stock of 16", 18" and 20" pipe.

**Pipe & Contractors Supply Co.**  
3 Dover Street NEW YORK

- 1—42-in. 3-Drum Invincible Sander.  
1—42-in. 3-Drum Columbia Sander.  
1—60-in. 3-Drum Columbia Sander.  
1—48-in. H. B. Smith Endless-Bed Sander.  
2—24-in. 2-Drum Egan Sander.  
1—24-in. 1-Drum Boss Sander.  
1—30x6 Fay 6-Roll Double Surfer.  
1—28x8 Woods 6-Roll Double Surfer.  
1—26x8 Rogers 6-Roll Double Surfer.  
1—30x12 999 6-Roll Double Surfer.  
2—30x6 Egan Cabinet Planers.  
1—27x7 Smith Cabinet Planer.

Woodworking Machinery of All Kinds  
Engines and Boilers

**THE CLEVELAND BELTING & MACHINERY CO.**  
1922 Scranton Road Cleveland, O.

## FOR SALE PROMPT DELIVERY

### ENGINES

- 1—24 and 42x48 Twin City Corliss Cond.  
1—26x48 Raynolds Corliss Condensing.  
1—18x36 Vilter Corliss.  
1—12x18 Hamilton Corliss.  
1—75 K. W. Ball Engine and Generator.

1—9x12x10 Worthington Duplex Pump.

4—Boiler Feed Pumps, about 7x5x8.

1—Kennicott Water Softener, 4000-gal.

1—1000 H. P. Cochran Heater.

1—500 H. P. Raynolds Heater.

1—12" Goubert Vertical Heater.

1—Surface Condenser of 350 4" tubes.

3—Complete Rope Drives and Shafting.

250-volt D. C. Belted Generators.

1—150 K. W. Ft. Wayne, 550 R. P. M.

1—100 K. W. Bullock, 650 R. P. M.

1—75 K. W. Bullock, 830 R. P. M.

1—75 K. W. Phoenix, 700 R. P. M.

125-volt D. C. Belted Generator.

1—100 K. W. Bernard, 600 R. P. M.

240-volt D. C. Motors.

1—175 H. P. Bullock, 625 R. P. M.

1—100 H. P. Westinghouse, 600 R. P. M.

2—60 H. P. Bullock, 725 R. P. M.

6—15 H. P. Northern, 350-1400 V. S.

1—3¼ H. P. Northern, 400-1600 V. S.

2—10 H. P. Fairbanks-Morse, 1350 R. P. M.

2—2 H. P. Fairbanks-Morse, 1800 R. P. M.

1—1 H. P. Peerless, 1600 R. P. M.

6—Panels of Switchboard.

**THE SANDUSKY CEMENT CO.**

817 Engineers Bldg., CLEVELAND, OHIO

August 29, 1918.]

## Immediate Shipment

1-400 H. P. Sterling Boilers, Roney Stokers;  
 1-300 K. W. 25-cy., 3-ph., 370-v. G. E. En-  
 gine Sets, Exciters, Switchboards, Surf-  
 ace Sets, Steel Stack, Piping, etc. COM-  
 PLETE PLANT. (To be sold as a whole.)  
 1-400 K. W. 25-cy., 3-ph., 370-v. G. E. Generator,  
 1-400 K. W. 25-cy., 3-ph., 370-v. G. E. Engine Set,  
 1-400 K. W. 25-cy., 3-ph., 370-v. G. E. Engine Set,  
 1-400 K. W. 25-cy., 3-ph., 370-v. G. E. Engine Set,  
 1-400 H. P. Ring Motor (used three mo.)  
 1-400 K. V. A., 2300-v., 60-cy., 3-ph. Steam  
 Turbine, with cond.  
 1-400 K. W., 600-v., 60-cy., 3-ph. Allis Turbos,  
 with cond.  
 1-400 K. W., 550-v., G. E., D. C. Engine Set  
 (recon. 275-v.)  
 1-400 K. V. A. Allis-Terry, 2300-v., 60-cy., 3-  
 ph. Turbo, with cond.  
 1-3"x18" 125 lbs. H. R. T. Boiler, with De-  
 troit stoker; stack, 5/8" plate.  
 1-400 H. P., 190 lbs. Heine Boiler, with  
 suspension.  
 1-400 H. P. Sterling Boiler, 150 lbs., with  
 suspension.  
 Send for our large list Power Plant Equip-  
 ment.  
**ROSS POWER EQUIPMENT CO.**  
 Indianapolis, Indiana

## FOR SALE

One new E. B. Hayes geared type double-end  
**Tenoner**  
 with single heads and cut-off saws in front,  
 no copers to take 90 in. between shoulders.

One Used 1500-lb. Bement-Niles  
**Steam Hammer**  
 double frame, 14 in. x 24 in. cylinder.  
 One Used Berlin No. 16

**Surfacer**  
 with 4 heads, 4 sides, slotted all around with  
 7 straight knives on each head and the  
 necessary bolts.

One New Covel No. 103-32 in. full  
**Automatic Knife  
 Grinder**  
 with water attachment.  
 Apply  
 Engineering Dept.,  
**WILSON & CO.**  
 U. S. Yards Chicago, Ill.

## ELECTRIC FANS

DESK, BRACKET AND CEILING TYPES FOR  
 BOTH DIRECT AND ALTERNATING  
 CURRENT AND UNIVERSAL TYPE

8" one speed plain black enamel fan with  
 plug and cord, ready for use .....\$6.00  
 Other sizes and types at equally at-  
 tractive prices.

**Piedmont  
 ELECTRIC CO.**  
 ELECTRICAL SUPPLIES, AUTO ACCESSORIES  
 ASHEVILLE, N. C.

## ELECTRIC MOTORS

**NATHAN KLEIN & CO.**  
 New York

Largest stock in America. You take no  
 chances; every motor guaranteed.

## 500Volt D. C. Motors

100 H. P. Westinghouse "M"; speed, 750.  
 50 H. P. Gen. Elec. "MPH"; speed, 900.  
 1-50 H. P. Gen. Elec. "MPH"; speed, 550.  
 1-50 H. P. Gen. Elec. "MPH"; speed, 600.  
 1-50 H. P. Gen. Elec. "MPH"; speed, 600.  
 1-50 H. P. Gen. Elec. "MPH"; speed, 800.  
 1-10 H. P. Gen. Elec. "MPH"; speed, 800.  
 "HONESTLY REBUILT."

**Miller-Owen Electric Company, Inc.**

"Pittsburgh's Electrical Clearing House"  
**Pittsburgh, Penna.**

## A. C. GENERATORS FOR SALE

75 K. W., 1200 R. P. M., 230-Volt, 60-Cycle, 3-  
 Phase Fairbanks-Morse.  
 125 K. W., 600 R. P. M., 230-Volt, 60-Cycle, 2-  
 Phase Allis-Chalmers.  
 These are belted, revolving-field type, in  
 excellent condition; also large stock New  
 and Used Motors and Generators.

V. M. Nussbaum & Co., Fort Wayne, Ind

One 60 H. P. G. E., type "DLC," 485/  
 550 R. P. M., direct-current Motor.  
 One 150 K. W. Stanley, 900 R. P. M.,  
 2400-volt, 60-cycle, 2-phase Genera-  
 tor.

**NATHAN KLEIN & CO.**  
 Howard and Centre Sts. New York City

## Selections From Our Stock

## 3-phase, 60-cycle Motors

Qu.	H.P.	Make	Volts	Type	Speed
1	10	Cr.-Wh. (with resistance type starter)	550	Q	1800
1	15	G. E.	220	I	900
1	15	Westgh.	220		1155
2	15	G. E. NEW	220	KT	900
2	15	Fbks.-M.	220/440	KBV	1200
2	20	Westgh.	220	CS	1150
50	30	Fbks.-M.	220/440	KBV	1200
13	25	Wagner	220/440	BP	1120
3	30	Wagner. NEW	220		850
1	35	G. E.	220	KT	600
1	35	Triumph	220/440		900
1	35	G. E. NEW	220	M	900
1	35	Westgh.	220		1170
1	40	Westgh. NEW	220	CS	570
1	40	Wagner. NEW	220/440	BP	850
1	40	Fbks.-M.	220		900
1	50	Triumph	220		720
1	50	Westgh.	220		850
1	75	Westgh. NEW	440	CS	720
1	100	Westgh.	440		1200
1	100	G. E.	550	K	600
1	100	G. E. NEW	550	M	600
1	125	G. E.	2200	L	600
1	150	G. E. NEW	220	M	580

## GEORGE SACHSENMAIER CO.

Office and Salesrooms, 141-43-45 N. Third St  
 Warehouses and Shop, 928-30-32 N. Third St.

## PHILADELPHIA

All kinds Motors and Generators in stock.

1-50 H. P. Milwaukee, 525 R. P. M., 125-volt,  
 D. C. Motor.  
 1-75 K. W. Westinghouse, 800 R. P. M., 125-  
 volt, D. C. Generator.

## NATHAN KLEIN &amp; COMPANY

Howard and Centre Sts. New York City

## "SPECIALS"

14x36 Hardie Tynes Corliss Engine, like  
 new; \$900.  
 12x36 Cooper Corliss, \$800.  
 100 K. V. A., 3-phase, 60-cy. Alternator, \$900.

**Power Machinery Exchange, Inc.**  
 1 Montgomery Street JERSEY CITY, N. J.

## ELECTRIC POWER PLANT FOR SALE

Now on skids at Redwine, Kentucky; can ship  
 quick. Recently overhauled and is in perfect  
 working order. Price \$6,750 f. o. b. cars Red-  
 wine, Ky., sight draft and B/L attached. Can be  
 inspected any time.

1 General Electric Curtis Turbo-unit consist-  
 ing of:  
 Generator: 1 750 K. W. General Electric  
 Vertical, 3-phase, 60-cycle, 2300 or 440 volts 1500  
 R. P. M.

Turbine: 750 K. W. Condensing (550) K. W.  
 Non-condensing Curtis Vertical, 1800 R. P. M.,  
 150 lbs. steam pressure at throttle, 28" vacuum.  
 Above complete with all piping equipment. No  
 condenser equipment.

**LENOX SAW MILL COMPANY, LENOX, KY.**

## Special for Quick Shipment

One 20x48 (240 h. p. at 100 lbs.  
 steam) Putnam Poppet Valve  
 Engine, with all fittings;  
 partly rebuilt; will be ready  
 soon.....\$2,000

One 150 kw., 3-phase, 60-cycle,  
 220-volt 514 r.p.m. Westing-  
 house revolving armature Al-  
 ternator, with base, pulley,  
 rheostat, necessary exciter  
 and switchboard; thorough-  
 ly rebuilt; immediate deliv-  
 ery.....\$1,500

## Send for Our Stock List

**GEO. F. MOTTER'S SONS**  
 YORK, PENNA.

## A. C. UNITS

1-62½ K. W. Crocker-Wheeler Generator, 3-  
 phase, 60-cycle, 2300 volts, direct con-  
 nected Skinner automatic engine.  
 1-75 K. V. A. Westinghouse Generator, 3-  
 phase, 60-cycle, 2300 volts, direct con-  
 nected Harrisburg automatic engine.  
 1-200 K. V. A. Westinghouse Generator, 3-  
 phase, 60-cycle, 2300 volts, direct con-  
 nected Erie ball cross-compound auto-  
 matic engine.  
 1-240 K. V. A. General Electric Generator,  
 3-phase, 60-cycle, 2300 volts, direct con-  
 nected Harrisburg automatic engine.

## BOILERS

2-72"x16" Return Tubular Boilers, 125 lbs.  
 pressure.  
 2-72"x18" Return Tubular Boilers, 150 lbs.  
 pressure.  
 1-200 H. P. Marine Boiler, 176 lbs. pressure.  
 All complete with stacks and fittings.  
 Immediate delivery.

**K. L. Jones Machinery Co.**  
 ATLANTA, GA.

THE O'BRIEN MACHINERY CO.  
ELECTRICAL EQUIPMENT FOR IMMEDIATE DELIVERY

## MOTORS—Alternating Current.

3-Phase, 60-Cycle.  
 325 H. P. Wagner, slip ring, 220-440-v.,  
 600 R. P. M.  
 200 H. P. Allis-Chalmers, slip ring,  
 220-440-v., 600 R. P. M. (NEW).  
 2-75 H. P. General Electric, 220-440-  
 v., 900 R. P. M. (NEW).  
 75 H. P. General Electric, 220-440-v.,  
 1200 R. P. M. (NEW).  
 2-50 H. P. Burke, 220-v., 1800 R. P. M.  
 (NEW).  
 30 H. P. General Electric, 220-v., 1200  
 R. P. M. (NEW).  
 25 H. P. Wagner, 220-440-v., 900 R. P.  
 M. (NEW).  
 20 H. P. Allis-Chalmers, 220-v., 900  
 R. P. M. (NEW).  
 15 H. P. Wagner, 220-440-v., 1200 R.  
 P. M.

## 2-Phase, 60-Cycle.

25 H. P. Burke, 220-v., slip ring, 900  
 R. P. M.  
 2-15 H. P. General Electric, 220-v.,  
 1200 R. P. M. (NEW).  
 3-10 H. P. Wagner, 220-v., 1200 R. P.  
 M. (NEW).  
 Large and complete stock smaller  
 sizes.

## 220-Volt, Direct Current.

No. H. P. Make Speed.  
 1 400 General Electric 300  
 5 200 Burke 375  
 1 150 Burke 900  
 1 100 Keystone 475  
 2 75 Keystone 500  
 1 50 Electro Dynamic 500  
 3 40 General Electric 1350  
 3 25 General Electric 1150  
 3 25 General Electric 1200  
 3 20 General Electric 1350  
 1 20 Westinghouse 650  
 1 15 General Electric 700  
 1 15 Allis-Chalmers 1150  
 2 10 General Electric 650

## Let us have your inquiries, as our stock is constantly changing.

## THE O'BRIEN MACHINERY CO.

119 North Third Street PHILADELPHIA, PA.  
 Long Distance Bell Telephone, MARKET 2121 Cable Address, O'BRIEN, PHILADELPHIA

## NEW MOTORS

Immediate shipments from Atlanta Stock

One each 5, 7½, 10, 25 and 30  
 H. P. General Electric 220 Volt  
 3-phase, 60 cycle motors Offered  
 subject to prior sale.

## Seeger-Walraven Co.

Machinery and Mill Supplies

38 W. Alabama Street  
 ATLANTA, GA.

Do you receive our Stock Sheet  
 Monthly? We have a complete  
 stock of Motors—Both A. C. &  
 D. C.—Ranging from 1 to 200  
 H. P.

Wire us—Write us—Phone us.  
 We are at your Service.

**DUQUESNE**  
 Electric & Mfg. Co.

Write, wire or 'phone our nearest office:  
 PITTSBURGH, PA.  
 or 230 S. LaSalle Street, CHICAGO, ILL.

## Dynamos and Motors

One 50 H. P., 220-volt, 60-cycle, 3-phase, 1120  
 R. P. M. Westinghouse Motor complete.  
 One 15 K. W., 125-V. Eddie Generator to  
 Ideal horizontal center-crank steam engine.  
 One 50 K. W. and one 100 K. W., 125-250-  
 volt, two or three-wire General Electric Gen-  
 erators, direct connected to Ball-Wood cen-  
 ter-crank steam engines.

Write for list of other machines.

**S. J. STEWART (ELECTRIC)**  
 312 Carondelet St. NEW ORLEANS, LA.

Long Distance Phone M2301-2302.

We Operate the Largest Electric Repair  
 Shop South

## FOR SALE

One No. 84,000 Hopper Scale, type beam;  
 One Tandem Compound Engine, 14x20x42, with  
 surface condenser and belt pump; one Ster-  
 ling Water Tube Boiler, 150 H. P.; one Fly-  
 wheel, 15 feet in diameter, ten grooves, 1½-  
 inch rope.

**RED WING MILLING CO.**  
 RED WING MINN.

## FOR SALE

1 Murray Special Tandem Corliss Engine,  
 about 400 H. P.  
 1 Direct-connected Engine and Dynamo, Ball  
 engine make, G. E., 500-light machine.  
 For further information apply

**ROYAL MILLS**  
 CHARLESTON, S. C.

## WILSON MACHINERY CO.

419 PINE ST. ST. LOUIS

## A. C. UNITS 3 PHASE 60 CYCLES

K. W. Make Volts Rev. Engine  
 75 2200 228 Simple Fulton Cor.  
 75 G. E. 2200 — Poppet Valve Chandler Taylor  
 100 G. E. 2300 3000 Curtis St. Turbine  
 2 105 G. E. 2300 237 16x14 Ideal  
 150 Westge. Any 237 16x21½ Westge. Vert. C.C.  
 150 2200 200 Simple Fulton Cor.  
 150 2200 200 Simple H. D. Corliss  
 200 West. El. 220 200 20x18  
 240 G. E. 2300 3000 Curtis Hor. Turbine  
 300 G. E. 440 — Mcl. & Ser. C. G. 4-Va.  
 2-400 Westge. Any 3000 Westge. St. Turbine Hor.  
 400 Westge. 2200 150 18-32x36 Corliss  
 500 Allis 2300 3000 Allis Steam Turbine  
 2-400 G. E. 2200 150 18-32x36 Corliss  
 2-750 Westge. 2300 200 14 & 22-30 Allis C. C. Cor.  
 All above generators can be reconnected  
 for 440-220 Volts.

## D. C. UNITS—250 Volts

K. W. Make Volts Rev. Engine  
 550 Allis 250 100 Allis Vert. C. C.  
 3 500 Ft. Wayne 250 90 22 & 38x48 Ham. C. C. H.  
 400 G. E. 250 120 18-30x42 Tand. Corliss.  
 300 G. E. 250 185 R. Wood C. C.  
 250 Westge. 250 150 18x24 Buckeye.  
 200 Allis 250 120 14 & 22-30 Allis C. C. Cor.  
 150 Goodman 275 210 18x19 Ridgway.  
 2 150 G. E. 250 270 R. W. Tand. Comp.  
 150 G. E. 3 wire 2000 Curtis Turbine.  
 100 C. W. 250 250 Erie Ball Tand.  
 1 75 Westge. 250 270 14x14 Payne.

## ENGINES

30x60 Allis; 28x48 Brown Corliss; 26x48 Allis;  
 22x42 Vilter Corliss; 18x36, 16x30 St. Louis Cor-  
 liss, practically new; 14x36, 12x36 Murray Cor-  
 liss, excellent condition.

## BOILERS

H. P. Press. Lbs. H. P. Press. Lbs.  
 48x14 125 2-200 Heine 125  
 60x16 125 2-200 Heine 180  
 2-60x16 125 1-225 Heine 125  
 72x16 125 3-260 Vogt 160  
 1-72x18 150 2-300 Wicks Vert. 150  
 72x20 150 2-375 Stirling 175  
 2-72x22 125 515 Stirling 150  
 2-125 B. & W. 150

This is only a partial list. Let us know your  
 exact requirements; we probably have it.

One—Electric Alternator, 175 K. W., 60-cycle,  
 3-phase.  
 One—Exciter for generator.

Six—25 K. W. Transformers.  
 One—Pair of 30" Lefel Turbines, suitable for  
 a 12' to 20' head, complete with rope drive  
 and accessories.

The above equipment practically new.  
 Immediate shipment. Address  
 556 Woolworth Building Lancaster, Pa.

## FOR SALE—Electric Motors

We make a specialty of, and have the largest stock  
 of SECOND HAND electric MOTORS and GEN-  
 ERATORS in America,  
 and buy and sell, rent,  
 exchange and repair  
 electrical machinery of  
 all kinds.  
**GREGORY ELECTRIC**  
 16th and Lincoln Streets, Chicago

2—Direct-current Hoist Motors, series wound,  
 type A, 75 H. P., 220 volts.

3—Electric Winches.

**NATHAN KLEIN & COMPANY**  
 Howard and Centre Sts. New York City



We have for sale the following which can be seen at our plant, foot of Morris Street, Delaware River, Philadelphia:

1—Robt. Wetherill & Co. 16-in. x 30-in. x 46-in.

### CROSS COMPOUND CORLISS ENGINE

with 24-in. x 10-in. Beam Condenser, operated from cross head fly-wheel, 16-ft. dia., 48-in. face capacity, 350 H. P.

1—Robt. Wetherill & Co. 23-in. x 48-in.

### TWIN CORLISS ENGINE

with 20-in. x 16-in. Beam Condenser, operated from cross head fly-wheel, 17-ft. dia., 50-in. face capacity, 500 H. P.

1—Woodruff Beach & Co., Hartford, Conn., 12-in. x 36-in.

### HORIZONTAL SLIDE VALVE ENGINE

box-bed, with outboard bearing 12-in. x 4-in. balance wheel, 18-ft. dia. x 18-in. face-driven wheel.

### 1 STEEL STACK

4-ft. dia., 40 ft. high.

### BAUGH & SONS COMPANY

Foot of Morris St., Delaware River

PHILADELPHIA, PA.

## HEINE BOILER

### FOR SALE

160 H. P. Heine Water Tube Boiler, new 1911, used 6 years, 180 lbs. working pressure, now being loaded on cars Norfolk, Va.

### HACKLEY MORRISON

### FOR SALE

1 40 H. P. Steel Fire-Box Liddell Boiler.  
1 35 H. P. Liddell Engine. 1 Hoge Field Sawmill. Edger, Cut-off Saw, Belting—everything complete. Price, \$1900 f. o. b. car. Address

Box 224 Vineland N. C.

### Heating Boilers

1—54"x16" Fire Box Heating Boiler.  
1—72"x16" Kewanee Fire Box Heating Boiler.  
Fine condition. Practically as good as new. Immediate delivery.

PFANNMUELLER ENGINEERING CO.  
1733 First National Bank Bldg. Chicago

### FOR SALE

A complete set of Hand Power Tools for operating a job-repair, boiler and sheet-iron shop—Punches, Rolls, Shears, Drill Press, Forges and Blacksmith Tools, Pipe and Bolt Stocks and Dies, Taps, etc.

### Eagle Iron Works

Box 237

Pine Bluff, Ark.

### FOR SALE

14x16-in., 265 R. P. M. Buckeye Engine, arranged for belt drive; has new cylinder and governor.  
2 sets, 30 sq. ft., Housel Shaking Grates.  
4 sets of Common Grate Bars, 6 ft. long, 3/4-in. air space.

J. H. HALM, Supt.

CITY OF PERU ILLINOIS

### 500 H. P. POWER PLANT COMPLETE, \$4500

2—250 H. P., 150-lb. pressure Water Tube Boilers with Dutch ovens, including all piping, heater and a fine steel stack, 60-inch x 150-foot, or will sell any part.

ROSE ELECTRIC COMPANY

6421 S. State Street Chicago, Ill.

Boilers and Engine For Sale  
2—72"x16" Atlas Horizontal Return Tubular Boilers, built for 125 lbs. pressure; insured by Hartford Boiler Insurance Co. for 120 lbs. pressure; complete with stack and full flush front and all standard fittings; can ship in sixty days.

1—14"x36" Hardie-Tynes Corliss Engine; in good condition, for immediate shipment.  
LITTLE ROCK FURNITURE MFG. CO.  
LITTLE ROCK, ARK.

## Boston Iron and Metal Co.

Buyers of Scrap Iron and Metals

Complete Plants Purchased

BALTIMORE

MARYLAND

### FOR SALE

## USED EQUIPMENT

1—150 H. P. Horizontal Tubular Boiler, with fixtures complete.  
1—125 H. P. Engine, Houston, Stanwood & Gamble make.  
1—Pittsburg Feed-Water Heater for 150 H. P. boiler.  
1—Steel Derrick, 10-ton capacity, 115' mast, 112' boom, bull wheel.

1—30 H. P. Double-Drum Hoisting Engine for use with Derrick.

1—22 H. P. "American" Hoisting or Slew-ing Engine for handling above Derrick.

1—No. 5 Austin Crusher.

### South Side Foundry & Machine Works

Charleston, W. Va.

## FOR SALE

4—150 H. P. Hor. Ret. Tub. Boilers, triple riveted, butt strapped, with fronts and fittings.  
Price for quick sale \$4200.00 f. o. b. cars Portland, Maine.

ARTHUR DANIELS COMPANY, Inc.  
21 Park Row  
New York

## BOILERS

### For Quick Shipment

10 250 H. P. Wicks Vertical Water-Tube Boilers, 150 lb. pressure.  
1 300 H. P. Wicks Boiler, 100-lb. pressure.  
1 500 H. P. B. & W. Boiler, 150-lb. pressure.  
2 400 H. P. B. & W. Boilers, 150-lb. pressure.  
4 250 H. P. B. & W. Boilers, 150-lb. pressure.  
1 275 H. P. B. & W. Boiler, 150-lb. pressure.  
2 200 H. P. Heine Boilers, 150-lb. pressure.  
1 425 H. P. Heine Boiler, 150-lb. pressure.  
1 400 H. P. Stirling Boiler, 150-lb. pressure.  
4 72"x18" Tubular Boilers, 125-lb. pressure.  
4 350 H. P. Stirling Boilers with Superheaters, 200-lb. pressure.  
4 66"x8" Tubular Boilers, 125-lb. pressure.  
3 48"x150" Steel Smokestacks.

"And other makes and sizes."

### J. F. DAVIS

1409 Harris Trust Bldg., Chicago, Ill.

## POWER EQUIPMENT FOR SALE

2—66"x16" H. R. T. Boilers, 100 lbs. steam, full fronts, all fittings and fixtures. Good as new.  
2—60"x14" H. R. T. Boilers, half-arch fronts, 100 lbs. steam, complete and in good condition.  
1—90 H. P. C. C. Buckeye Engine.  
1—18"x22" Potter S. C. Engine, Pickering governor, pulley and flywheel on one end shaft. Excellent condition.

All the above offered at bargains to be moved at once.

### The J. G. Tilley Co.

INCORPORATED  
BRISTOL, VA.

### FOR SALE

1—12x12x12 Ingersoll-Sargeant straight-line Air Compressor.  
1—10x10x12 Cox Duplex Compressor.  
1—16x16x20 Ingersoll straight-line Compressor.  
1—12x24 belt-driven high-pressure Compressor.  
4—Air Receiving Tanks, 60"x20" long, 100 lbs. pressure.

### Norton Machinery Co.

Cincinnati, Ohio

### (2) 150 H. P. Geary Water Tube BOILERS

Insured 150 lbs. with Roney Stokers, Breeching and Stack.

The Herfurth Engine Co., Inc.  
ALEXANDRIA, VA.

### FOR SALE

1—300 H. P. Edgemore Water Tube Boiler.

IMMEDIATE DELIVERY  
SCULLY-JONES & COMPANY  
Railway Exchange Bldg. CHICAGO, ILL.

### Horizontal Boilers

2—72"x18" H. R. T. "Penna. Boiler Works;" good for about 70 lbs. steam pressure. Good condition.

L. F. SEYFERT'S SONS, Inc.  
437 N. 3rd Street PHILADELPHIA

### FOR SALE

Three 325 B. & W.; one 300 and two 200 H. P. Sterling, all complete; two 275 H. P. Heine Boilers, all complete; two 150 lbs. steam; two 42 Stacks, 100 ft. each; one Stack 75 and 66" diameter, each 150 ft. long, heavy metal; 1500 ft. Boiler Tubes, 4" diameter, 18 and 2 ft. long, good as new; 15,000 ft. 4" Wrought Pipe, with new threads and couplings; 1000 Belted Air Compressor; two 12x12 Upright and Horizontal Automatic Engines; 1000 Slide Valve Engine, \$300; 25 tons each 4 and 6" Cast-Iron B. & S. Pipe; two 100 H. P. Horizontal Return Tubular Boilers and one 150 H. P., 125 lbs. steam, butt strapped, complete; two Gasoline Concrete Mixers on wheels, new, \$450 each; 7x12 Saddle-Tank locomotive, 24" gauge, perfect condition; 100 ft. Galvanized and Bright 3/4 Wire Rope, long and short lengths; 90 reels 1" to 2 1/2 Plow Steel Wire Ropes, long and short lengths, quality and lengths guaranteed; Traction Shovel, with 14-yard dipper, 150 tons Cast and Wrought Scrap, located Watertown, N. Y.; one Model Marion 28 Revolving Shovel, two years old like new, 3/4 dipper.

EASTON MACHINERY CO.  
DRAKE BLDG. EASTON, PENNA.

We own and offer for prompt shipment

## BOILERS

3—300 H. P. Stirling Water Tube Boilers, all fittings and fixtures, 8 years old, F. & C. Inspection, 150 lbs.  
1—72x18, 150 H. P. H. R. T. Boiler, all fittings and fixtures, 110 lbs.  
1—40 H. P. Ames locomotive-type Boiler, all fittings and fixtures, 100 lbs.

## HEATER

1—750 H. P. Erie City Closed Type, brass tubes, all necessary fittings.

## STACK

1—54"x80" Guyed Steel Stack, complete with guy wires and cast-iron base.  
The Hawkins-Hamilton Co., Inc.  
Richmond, Va.

### MACHINERY FOR SALE

2 Vacuum Raw Stock Dyeing Machines, made by Franklin Process Co.; excellent condition; immediate shipment.  
2 Ailing & Curtis Dust Collectors.  
No. 4 1/2 Sirocco Motor-Driven Exhauster, outlet 18x18.  
26" T. L. M. Co. Extractor, bottom discharge, copper basket, copper curb.  
Large stock Extractors, 20" to 54" diameter baskets.  
N. Y. F. Co. Filter, 5' high, 3' 4" diameter.  
Belt-Driven Hoist, drum 16" diameter, 3' long.

INTERSTATE MACHINERY CO.  
TROY, N. Y.

## One Norton Automatic Can Seamer

Will seam cans 2 1/2 and 3 inches in diameter and 1 to 5 1/2 inches in height; capacity 1200 cans per hour. Seamer in A-1 condition.

Write to

American Dehydrating Company  
WAUKESHA, WISCONSIN

## DRY KILN

Belted outfit complete; Fan Housing, 68" diam.; Two-Coil Ovens, each 72"x48". Strictly fine condition. Made by St. Albans Mfg. Co., St. Albans, Vt. Bargain for prompt buyer.

H. M. BRUCH  
P. O. Drawer 45 SYRACUSE, N.Y.

## Corliss Engines, Water Tube Boilers and Direct Connected Unit

### DIRECTED CONNECTED UNIT

- (1) Engine, Rice & Sargeant, Simple, Non-Condensing, 30x48", 750 H. P. Generator, Westinghouse, D. C., 10-pole, 550 V., 90 R. P. M., 500 K. W.

### ENGINES

- (3) Allis-Corliss, Simple, Non-Condensing, 30x60".

### GENERATORS

- (3) Westinghouse, D. C., 4-pole, 550 V., 500 K. W.

### LEATHER BELTS

- (3) 53", 140' long, Double Leather Belts.

### BOILERS

- (8) Campbell & Zell Water Tube Boilers, 12 tubes high and 12 tubes wide, nominal rating 275 H. P. each; set in batteries of two each, steam pressure 150 lbs. each.  
(1) Campbell & Zell Water Tube Boiler, 9 tubes high and 12 tubes wide, nominal rating 225 H. P., pressure 150 lbs.

### PUMPS

- (3) Worthington Duplex Feed, 9"-5 1/4"x10".  
(1) Knowles Deep Well, 12"-7 1/4"x38".  
(1) Westinghouse 9 1/2" Air Pump.  
(2) Centrifugal Circulating, Direct-Driven, 12" Pumps, each driven by a 70 H. P. General Electric 550-volt direct-current motor, speed 500 R. P. M.  
(2) Horizontal 13x8" Worthington Dry Vacuum Pumps, direct driven by a 12 H. P. General Electric 500-volt direct-current motor, speed 300 R. P. M.

### MISCELLANEOUS

- One (1) Berryman Feed Water Heater, 5"x17".  
One (1) Locke Damper Regulator, complete with Damper Operating Mechanism.  
One (1) 15-ton Travelling Crane, 70' span, with Hand-Operated Bridge and Hoist.  
Two (2) Perfection Oil Filters, 100-gallon capacity each.

## BOSTON IRON & METAL CO.

PRATT and FREMONT STS.

BALTIMORE, MD.

## Having Just Released From Service, We Offer For Prompt Delivery The Following Machines:

- 7-24" Davis Turret Lathes.  
6-18"x8' Superior Engine Lathes, with Compound Rest, Three-Step Cone, Quick-Change Gears.  
14"x6' Monarch Engine Lathes, Three-Step Cone, Compound Rest, with Feed Rod, but no Lead Screw.  
1-20" Fay & Scott Turret Lathe.  
2-20"x8' American Engine Lathe, with Taper Attachment, Compound Rest, arranged for motor drive.  
4-6-A "Potter & Johnson" Semi-Automatics, motor driven.  
2-14" "Fay Automatics," motor driven.  
3-No. 2 Type Sectional Ovens. Inside dimensions 12' wide, 12' deep and 8' high.  
4-21 1/4"x26" "Greenlee" Flat Turret Lathes, with oil pump and piping.  
1-31 1/4"x40" "Greenlee" Flat Turret Lathe, with oil pump and piping, also No. 4 chucking equipment.

The above are all in A-1 condition. Many of the machines are less than two years old.

We also have a number of other machines that will require overhauling.

Write or wire for a list giving prices and full particulars.

Be sure and send all communications to the following address:

**Westinghouse Electric & Mfg. Company**  
25th Street and Liberty Avenue Dept.  
Pittsburgh, Pa.

# 1876 THE MACHINERY HOUSE OF THE EAST FRANK TOOMEY, Inc. 1918

### LATHES

- 10"x4' Climax.  
14"x6' New Carroll Jamieson Quick Change.  
14"x8' New Carroll Jamieson Quick Change.  
4-15"x6' New Sidney D. B. G. Quick Change, swing 17".  
7-17"x8' New National Quick Change.  
17"x8' New Sidney D. B. G. Quick Change, swing 19".  
18"x8' Kahn Mayer.  
18"x8' Flather.  
18"x8' Schumaker Boye.  
18"x8' Reed.  
24"x30' Reed.  
32"x24' Fay & Scott.  
34"x28' McCabe Double Spindle.

### TURRET LATHES

- 2"x24' Jones & Lamson Geared Head.  
2-24' Davis Boring and Chucking Lathes.  
1-1/2" S. & K. Back Geared Wire Feed.  
2-No. 1 Bardon & Oliver Hand Screw Machines.

### HORIZONTAL BORING MILLS

- 4" Bar Niles Knee Type.  
2 1/2" Bar Warney & Swasey Knee Type.

### MILLERS

- No. 2 Kempamith New Universal, with vertical attachment.  
No. 1 1/2 Cincinnati Universal.  
No. 1 U. S. New Hand Miller.

### SHAPERS

- 4-14" New Steptoe.  
1-14" Steptoe.  
6-15" New Steptoe B. G.  
2-24" New Steptoe B. G.  
18" Bement Travelling Head.

### GRINDERS

- 1"x30" Brown & Sharpe.  
1"x24" Iroquois.  
10"x20" Bath.

- No. 1 New Fraser Universal.  
No. 1 New Grand Rapid Universal Reamer and Cutter.  
No. 2 Grand Rapid Universal Reamer and Cutter.  
No. 100 New Wells Universal Reamer and Cutter.  
No. 3 B. & S. Universal Reamer and Cutter.

### RADIAL DRILLS

- 42" Niles Plain Cone Drive.  
30" Universal Plain Cone Drive.  
42" New Canedy-Otto.

### DRILLS

- 36" New Superior Sliding Head.  
32" New Superior Sliding Head.  
30" G. & E. Sliding Head.  
2-28" New Superior Sliding Head.  
2-25" New Superior Sliding Head.  
25" New Superior Sliding Head, with tapping attachment.  
24" New Superior Stationary Head.  
21" New Superior Stationary Head.

- 20" New Superior Stationary Head.  
20" New Champion Stationary Head.

### HAMMERS

- 350-lb. Sellers Single Frame Steam.  
250-lb. New Little Giant Belt.  
4-100-lb. New Little Giant Belt.  
3-60-lb. New Little Giant Belt.  
4-25-lb. New Little Giant Belt.

### PLANERS

- 36"x36"x8' Gray, two heads.  
30"x30"x10' Fitchburg, one head.  
24"x24"x8' Gray, one head.

### NUT TAPPERS

- 1/2" to 2" Six-Spindle National.  
1/2" to 3/4" Five-Spindle National.  
3/16" to 1/2" Five-Spindle National.

### SLOTTERS

- 10" Newton Power Feed to Rotary Table.

## "STEAM AND ELECTRICAL EQUIPMENT"

### WATER TUBE BOILERS

- 1-150 H. P. Babcock & Wilcox Water-Tube Boiler, 125 lbs. steam working pressure, with 50 ft. of 36" dia. stack, heater, feed-water pump and damper regulator; complete plant.  
2-250 H. P. Babcock & Wilcox Water-Tube Boilers, 150 lbs. steam working pressure.

### HORIZONTAL RETURN TUBULAR BOILERS

- 150 H. P. 72"x18" Coateville, 125 lbs. steam pressure.  
150 H. P. 72"x18" Vulcan Iron Works, 125 lbs. steam pressure, with stack and steam blower.  
2-150 H. P. 66"x20" Sotter Bros., 115 lbs. steam pressure.  
50 H. P. 48"x16" Lebanon, 100 lbs. steam pressure.

### LOCOMOTIVE AND PORTABLE BOILERS

- 100 H. P. Locomotive Boiler, 100 lbs. steam pressure.  
30 H. P. Locomotive Boiler, 125 lbs. steam pressure.  
40 H. P. Marine Type Return Flue Portable Boiler, 100 lbs. steam pressure.  
25 H. P. Erie City Iron Works Portable Return Tubular Boiler, 100 lbs. steam pressure.

### STORAGE TANK

- 6' dia. x 31' 6" long Storage Tank, 3/16" material, capacity 8000 gallons.

### STEAM TURBINE A. C. SET

- 1-110 H. P. De Laval Steam Turbine, direct connected to two 37 1/2 KVA General Electric 2300-volt 60-cycle 3-phase Alternators with direct-connected exciter.

### A. C. OIL ENGINE UNIT

- 1-375 K. W. Fort Wayne 3-phase 60-cycle 2300-volt Alternator, direct connected to one pair of Diesel Vertical Oil Engines.

### OIL ENGINES

- 40 H. P. Mietz & Weiss Horizontal Oil Engine.  
18 H. P. Mietz & Weiss Horizontal Oil Engine.

### BELT-DRIVEN AIR COMPRESSORS

- 22-13x18" Laidlow-Dunn-Gordon Two-Stage Belt-Driven Duplex Air Compressor, 750 cu. ft. capacity.  
12 1/4"x12" Ingersoll-Rand Single-Stage, 305 cu. ft. capacity.

### MOTORS

- Large stock of A. C. and D. C. Motors, new and used, from 1/2 to 250 H. P., in stock for immediate delivery.

**PHILADELPHIA, PA.**

**127-131 North Third St.**



## HARRIS BROTHERS COMPANY, CHICAGO

### Offer From Stock

#### Pumps

2-12x20x10x24" Snyder-Hughes Tandem Compound Steam Pumps.

#### Blower

No. 4½ Root Positive Blower.

#### Wire Cable

Several thousand feet of Steel Wire Cable, ranging in sizes from ¾ to 2". Send us a memorandum of your requirements.

#### Rails

1800 tons 70-lb.  
250 tons 85-lb.  
90 tons 40-lb.  
Complete with angle bars and spikes for immediate delivery.  
6 miles 36" gauge Portable Track, with steel ties, 20 and 25-lb.

#### 20" Pipe

15 miles of 20" Spiral Riveted A. & R. Pipe, with flanged compression connections. This pipe is made of No. 8 gauge; is in A-1 condition. Delivery can be made immediately.

#### Locomotives

2-20" gauge Steam Locomotives.  
1-24-ton Shay geared, standard gauge Locomotive.  
1-50-ton, 4-wheel, standard gauge Locomotive.  
1-60-ton American & Baldwin.  
1-65-ton American & Baldwin.  
1-6-wheel American Locomotive, 61 and 63-ton, 180 lbs. pressure.

#### Surface Condensers

1-1400" Wheeler.  
3-600" Worthington.  
2-500" Worthington.  
1-1500" Baragwanath.  
1-1200" Baragwanath.

#### Air Compressors

1-10x10 Laidlaw-Dun & Gordon.  
1-18x29x14x24 Laidlaw-Dun & Gordon.  
1-8x8x10 Rand.  
1-10x16x10x10 Clayton.  
1-14x22x14-16 Chicago Pneumatic Tool Co.  
20-9½x9½x10 Westinghouse air-cooled Locomotive Compressors.  
2-1200" Ingersoll-Imperial type, low duty, 22x14x16x16.  
2-12 H. P. Fairbanks-Morse gasoline-driven Air Compressors, 70 cu. ft. cap., 80 lbs. pressure.

#### Hoisting Engines

1-7x10 double cylinder, single drum Mundy Hoisting Engine, skeleton type.  
3-4½x6 double cylinder, single drum Stroudsburg Hoisting Engines.  
1-8½x10 double cylinder, double drum Flory Hoisting Engine, skeleton type.  
1-9x10 double cylinder, double drum Russell Wheel & Foundry Co. Engine.  
1-Double cylinder, double drum Flory Hoisting Engine, skeleton type, cylinders 8½x12.

#### Electric Traveling Crane

1-Niles Electric Traveling Crane, 46' span, 15-ton cap., with auxiliary hoist 5 ton; has 4 motors, 20 H. P.—one 5 H. P., for main hoist and 3 H. P. for auxiliary hoist; voltage, 220; D. C.

#### Steel Tanks

1-12,000-gal. Storage Tank.  
2-11,000-gal. Storage Tanks.  
6-10,000-gal. Storage Tanks.  
1-8,000-gal. Storage Tank.  
2-6,500-gal. Car Tanks.  
2-5,500-gal. Car Tanks.  
2-3,000-gal. Car Tanks.  
1-8x12" Air Tank; double riveted, ¾" material.  
1-7x10" Air Tank; double riveted, ½" material.  
1-60"x24" Pressure Tank, ¾" material.  
1-60"x18" Pressure Tank, 7/16" material.  
2-60"x14" Tanks; double riveted, ¾" plate.  
25-16"x48" Pressure Tanks.  
1-30" dia., 135' high Water Tower Tank, made of plates ½", ¾", 5/16" and ¼".  
Will furnish blueprint upon request.

#### Power Plant

We offer for quick sale an exceptionally fine 600 H. P. Power Plant, consisting of:  
4-72x18" Kroschelle Horizontal Tubular Boilers; triple riveted, butt strapped, 125 lbs. working pressure; complete with full flush front, shaking grates, steam drums, all steam-pipe connections.  
1-Complete Sturtevant Mechanical Induced Draft, with fan and direct-connected engine of sufficient capacity for entire battery.  
1-Complete Coal-Handling Apparatus, with automatic weighing device, electrically controlled.  
Write for full details and blueprint plans.

Our Latest Machinery Bulletin MR-306 sent free on request.

HARRIS BROTHERS COMPANY

CHICAGO

#### Boilers

1-15 H. P. Firebox Boiler, mounted on wheels, with engine on top.

#### Scotch Marine Boilers

10 Scotch Marine Boilers, various sizes.

#### Dump Cars

30 Western & Oliver type, all-steel, 12-yd. Dump Cars, which we offer for sale or lease. These cars are located at various points in the East.

#### Locomotive Cranes

1-20-ton O. & S., 8-wheel, 42½' boom.  
1-40-ton Bucyrus, 8-wheel, 55' boom.  
1-2-ton, 4-wheel railway type, 110-volt storage battery Electric Locomotive Crane; boom 15', full revolving, with motors and controllers.  
1-15-ton, 8-wheel American.

#### Hydraulic Riveting Outfit

1-Chambersburg 150-ton Hydraulic Riveting Outfit, consisting of 1 hydraulic riveter, 12" 8" gap with pump, hydraulic hoist, crane, accumulator and container.

#### Guillotine Shear

Brand new Covington Guillotine Vertical Gate Shear; capacity 36" between housings; stroke 1¼"; shears 1¼" plate; clutch control; arranged for motor drive. Will sell with or without motor. Shear is brand new, and is offered for prompt shipment; subject to prior sale.  
Wire, or write for full details.

#### Industrial Dump Cars

150-20" gauge, 1-yd. cap., V-shaped and one-side Dump Cars.  
75 flat-top, 20" gauge Industrial all-steel Cars.  
118-24" gauge K. & G. Box Cars, 30 cu. ft. cap.  
67-24" gauge Atlas Flat Cars.

#### Steel Buildings

1-Steel Building, 76' clear span, any length up to 600' long, columns 30' to bottom chord.  
1-Steel Roof complete, 80' clear span, 340' long, consisting of 17 80' hip trusses, purlins, wind bracings, etc.  
1-Steel Frame Building, 80'x140', consisting of columns, trusses, purlins, window framing, bracings, etc.  
1-Flat Roof Steel-Frame Building, 80' clear span, 160' long, 40' columns, all complete.  
1-Lot, consisting of 40 76' clear-span Flat Roof Trusses.

#### Water Pipe

50,000 ft. 1"	15,000 ft. 4"
35,000 ft. 1¼"	8,000 ft. 6"
65,000 ft. 2"	2,000 ft. 8"
48,000 ft. 2½"	3,000 ft. 10"
8,000 ft. 3"	1,500 ft. 12"

13,000 ft. 1½" double, extra strong, seamless Steel Tubing; good for 5000 lbs. pressure, fitted with Briggs threads each end, and couplings.

#### Crushers and Mixers

1 No. 4 Champion portable 4-Jaw Stone Crusher, with elevator mounted on wheels, 9"x15" opening.  
1 No. 6 McCulley heavy-duty, belt-driven gyratory crusher.  
1-1-yard steam-driven chain Belt Mixer.

#### Direct Connected Outfit

1-Triumph 150 K. W., 250-volt, D. C. Electric Generator, with 16x21 Chuse 4-valve engine, complete with switch-board.

#### Punches and Shears

1-Heavy-duty Gate Shear, with 21" blade, 11" throat, cap. cutting up to 1½" plates, spur gear, 42" dia. by 10" face.  
1-40" Rock River Stake Horn Riveter, ½".  
1-Bement-Miles combined Punch and Shear; depth of throat 22", shears 6x1" flats.  
1-Single End Shear, 22" throat.  
1-Lennox Rotary Bevel Shear; cuts ½" plate.  
1-Alligator Shear for 1½-inch plate.  
1-Alligator Shear for 2" plate.  
1-Alligator Shear for 2½" plate.  
1-Wiener Steel Plate I-Beam Shear for 15" I-beams.  
1-Single End Punch, 21" throat, ¾" through ¾".  
1-Plate Splitting Shear, 12" knives for ½" plate.  
1-Single End Shear, 12" throat; shears 8x1½".  
2-Niles 12" boiler-makers' Flanging Clamps.

#### Overhead Traveling Cranes

1-4-ton, 2-motor Electric Crane, 20' span, 220-volt.  
2-75' Steel Plate Girders, equipped complete with 20-ton capacity hand-power trolley.  
1-25-ton hand-power Traveling Crane.  
1-Hand-operated, 40-ton Crane, 44' 3" span, Cleveland Car Co.

## Machinery For Sale

1-Each No. 6, No. 7 and No. 8 Goubert four-pass Vertical type Feed Water Heaters.

1-Steel Tank, 3' diameter, 10' high.

1-Steel Tank, 6' diameter, 10' high.

2-Epping Carpenter Pumps, 4½x2¾x4.

1-Epping Carpenter Pump, 7½x6x10.

1-Worthington Pump, 7½x4½x10.

1-Atlas Horizontal Steam Engine, 8x12.

1-N. Y. Safety Steam Engine, Upright, 9x12.

Shafting, Hangers, etc.

### SHUNT WOUND D. C. MOTORS & GENERATORS

H. P.	Make	Volts	Speed	Amps.
10	G. E.	230	1250 RPM	37.6
20	G. E.	550	1350 RPM	30.7
15	Q. C.	220	775 RPM	
5	G. E.	230	1100 RPM	19.
2	Fidelity	220	1000 RPM	
Generator, Roth Bros.		120	2300 RPM	5.

### BOX PLANT MACHINERY FOR SALE

2-Knowlton Strippers, 10" Universal Head.  
1-Knowlton Stripper, 10" Universal Head (New).  
2-Knowlton Strippers, 8" Universal Head.  
1-Hobbs Stripper, 10" Hand Cut-Off.  
1-Robinson Top Labeler, Automatic Cut-Off, 18".  
1-Hobbs Top Labeler, Foot Cut-Off, 12".  
1-Lynn Top Labeler, Foot Cut-Off, 18".  
2-Robinson Paper Shears.  
1-Oswego Hand Lever Paper Cutter, 32".  
1-Robinson Paper Shear, 30".  
1-Robinson Power Corner Cutter, 5½".  
1-No. 10 Knowlton Stayer.  
1-No. 7 Knowlton Stayer.  
1-Robinson Paper Slitter, 29".  
1-No. 3 Hobbs Automatic Ender.  
1-Universal Pasting Machine, No. 8.  
2-Copper Glue Pots, 12", Open.

### MISCELLANEOUS MACHINERY

1-Legeman Waste Baling Press, Style 19M, 36x30x24, No. 4487.  
1-Hoisting Machine, Fairbanks.  
Platform Scales (arm 100 lbs.).  
(Bed 23x30½) 2000 lbs.  
(Bed 25x32) 2000 lbs.  
(Bed 21x28) 1500 lbs.  
Atlas, No. 09221.

### MACHINE SHOP MACHINERY FOR SALE

1-Hamilton Screw-Cutting Lathe, 18x72 Counter Shaft, complete.  
1-Youngs Screw-Cutting Lathe, 10x34 Counter Shaft, complete.  
1-Wood-Turning Speed Lathe, Counter Shaft complete.  
1-Grind Stone, 24".  
1-Emery Wheel Stand.  
1-Drill Press, 16", Double Speed.  
1-Drill Press, 16", Single Speed.  
1-Curtis & Curtis Pipe Machine, 2½" to 6".

## Standard Knitting Mills Co.

Ralph Street and Grandview Ave.  
BROOKLYN, N. Y.

## REBUILT MACHINERY ALL IN STOCK

**BOILERS:** 2-72x18; 2-72x16; 2-66x16; 1-60x16; 1-54x14; 2-48x16; 2-48x14.  
**BOILER TUBES:** 20,000 feet of 4-in.; 10,000 feet of 3½-in.; 5000 feet of 3-in.  
**ENGINES:** 14x16 Buckeye; 14x21 Lane & Bodley; 14x18 Chandler & Taylor; 12x30 Lane & Bodley Corliss; 12x18 Atlas; 11x13 Russell; 10x14 Chandler & Taylor; 8x12 new Nagle; 10x12 Erie; 9x14 Allfree; 7½x14 Brownell.  
**MOTOR GENERATOR SET:** 1-100 K. W. Morgan-Gardner, 250-volt, D. C. Generator, direct connected to a 150 K. V. A. General Electric 3-phase, 60-cycle, 2300-volt, 600 R. P. M. synchronous motor, with switchboards, instruments, etc.  
**GENERATORS—60-CYCLE:** 175 K. W. Westinghouse, 3-phase, 2300-volt at 900 R. P. M.; 150 K. W. G. E., 3-phase, 220-volt at 600 R. P. M.; 85 K. W. Allis-Chalmers, single phase, 2200-volt at 900 R. P. M.; 90 K. V. A. Electric Machinery Company 3-phase, 2300-volt at 1200 R. P. M.; 75 K. W. Fairbanks-Morse, 240-volt, 900 R. P. M.  
**MOTORS—3-PHASE, 60-CYCLE:** 150 H. P. new General Electric, 440-volt, 720 R. P. M.; 100 H. P. new General Electric, 440-volt, 720 R. P. M.; 100 H. P. new General Electric, 440-volt, 900 R. P. M.; 75 H. P. new General Electric, 220-volt, 900 R. P. M.; 50 H. P. new Allis-Chalmers, 440-volt, 900 R. P. M. (slip ring); 40, 30, 2-25 H. P., all new General Electric, 220-volt, 1200 R. P. M. Also other sizes.  
**MOTORS—D. C., 250 VOLTS:** 100 H. P. Allis-Chalmers at 600 R. P. M.; 55 H. P. General Electric at 900 R. P. M.; 30 H. P. Northern at 600 R. P. M.; 2-25 H. P. Fischer at 500 R. P. M.; 1-20 H. P. Crocker-Wheeler at 750 R. P. M.; 15 H. P. Phoenix at 1750 R. P. M.; 10 H. P. Jantz & Leist at 900 R. P. M.; 3 H. P. at 150 R. P. M., direct connected to iron-frame swing saw.

### POWER PLANT MACHINERY AND ACCESSORIES

Send us your requirements

**THE RANDLE MACHINERY CO.**

1734 Powers St.

Cincinnati, Ohio

## "MACHINERY BARGAIN" ICE REFRIGERATOR PLANT

100-ton Wolf Refrigerator, Steam and Ammonia Condenser, complete. Original cost, \$12,000. Price, \$3000.  
 50-ton De La Vergne Refrigeration. Cost \$12,000. Price, \$1250.  
 20-ton De La Vergne Refrigerator. Cost \$7000. Price, \$500.

Also,

### LARGE WOODWORKING PLANT

150 H. P. Corliss Engine. 30 H. P. 8x14 Horizontal Center-Crank High-Speed Engine, 36x8 cast-iron flywheel. Duplex Pump, 40 H. P. Engine, 60x16 flywheel. 4 Boilers, 20, 50 and 150 H. P. Large number woodworking machinery: Lathes, Saw, Rim and Spoke Machines; 40 tons tracks, shafting, hangers and pulleys. Original cost, \$25,000. Sell as a whole for \$5000.

**J. THOMPSON BROWN & CO.**

RICHMOND, VA.

## FOR WIN THE WAR SERVICE

AND IMMEDIATE DELIVERY, WE OFFER A No. 1 APPARATUS  
PARTIAL LIST AS FOLLOWS

### BOILERS

- 1-1400 H. P. Complete Boiler Plant, consisting of:
- 4-350 H. P. Stirling, Class N, No. 16, 190 lbs. steam pressure, 150 degrees superheat Boilers, complete, with all piping, valves, breeching, heaters, pumps, etc.
- 3-500 H. P. Edge Moor Water Tube, 200-lb. allow.; practically new Jones stokers, if required.
- 2-500 H. P. B. & W. Steel Header, 185-lb. allow., butt joint, double riveted, with chain-grate stoker.
- 2-400 H. P. A. & T. B. & W. Steel Header, 175-lb., re-erection, triple riveted butt joint, with Green chain-grate stokers.
- 1-557 H. P. Stirling Lap Seam Drum, 150-lb. allow.; perfect condition, hand fired.
- 7-72-in. x 18-ft. triple riv., butt joint, 150-lb. allow., hand fired; stacks and all fittings.

### 60-CYCLE UNITS

- 2-750 K. W. Westinghouse, 60-cycle, 3-phase, 2300-volt, R. F. Altr., dir. con. to heavy-duty cross-compound Corliss engine.
- 2-600 K. W. General Electric, 60-cycle, 3-phase, 2200-volt, R. F. Alt., dir. con. to H. D. cross-compound Corliss engine.

### FREQUENCY CHANGER SET

- 1-1000 K. W. Westinghouse Frequency Changer Set, 60-cy., 3-ph., 2300-v., to 30-cy., 6000-v., on sub-base and solid shaft, with dir. con. exciter.

### 25-CYCLE UNITS

- 2-300 K. W. Westinghouse, 25-cy., 3-ph., 440-v., R. F. Alternator, dir. con. to cross-comp. Allis-Chalmers, heavy-duty, double-ported, double-eccentric engines.

- 1-350 K. W. Westinghouse, 25-cy., 3-ph., 6600-v., R. F. Alternator, dir. con. to heavy-duty Bail automatic engine.
- 3-1000 K. V. A. Westinghouse, 25-cy., 3-ph., 440-v. Alternator, with cross-compound, heavy-duty Corliss engines.

### ROTARIES

- 1-250 K. W. Westinghouse, 25-cy., 3-ph., Rotary, 370-v., A. C.; 550-v. D. C., with 3-100 K. V. A. transformers, 6600-v. primary panel, etc.
- 1-500 K. W. G. E., 60-cy., 3-ph., 445-v., A. C.; 600-v. D. C., with transformers 13,200-v. primary, panel, etc.

### TURBINES

- 1-1000 K. W. (old rated actual capacity approximately 1500-1800 K. W.) Westinghouse Horizontal Condensing Turbo Alternator Unit, 60-cy., 3-ph., 2300-4400-v., 1800 H. P. M., complete, with surface condensers, piping, etc., to make complete installation.
- 1-9500 K. V. A. Westinghouse-Parsons Condensing Turbo Alternator, 80 per cent. P. F., 60-cy., 3-ph., 2300-v., 1200 R. P. M., complete, with condenser.
- 1-5000 K. W. Allis-Chalmers (New) Turbo Alternator, without condenser, 80 per cent. P. F., 60-cy., 3-ph., 2300-v.
- 1-1500 K. W. Westinghouse-Parsons Condensing Turbo Alternator (Old Rated), approximately 2500 K. W. capacity, 60-cy., 2-ph., 2400-4800-v., with Wheeler condenser.

### MOTORS

- 1-1200 H. P. General Electric, 25-cy., 3-ph., 2200-v., 250 R. P. M. Induction Motor, complete, with shaft extension both ends.
- 1-250 H. P. Burke, 60-cy., 2 or 3-ph., 2200-v. Synchronous Slip-Ring Motor, with panel, coupled to 24-in. Platt twin rotating pump, Twenty Million G. P. D., 45-ft. head.

**PAUL STEWART & COMPANY**  
CINCINNATI, OHIO

## For Sale Hoisting Engine

Stationary 8¼x10 double-cylinder double-drum Hoisting Engine, with independent swinger; engine 4½, with 40 H. P. boiler, stiff-leg derrick, 1¼-yd. clam-shell bucket, complete; immediate delivery; practically new.

Address

### CYLINDER

care Manufacturers Record  
Baltimore, Md.

## For Sale Marine Equipment

One 225 H. P. seagoing tug.  
 One 1500-ton steel barge.  
 One floating clam-shell or orange-peel digger with Lambert equipment; immediate delivery.

Address

### MARINE

care Manufacturers Record  
Baltimore, Md.

## Used Refrigerating Machinery bought, sold and erected.

Some bargains must be moved AT ONCE.

6-ton York Belt Ice Plant, 80 cans, complete; \$1600 f. o. b. cars.

6-ton Remington Refrigerating Plant—belt drive, high and low sides, \$750, complete; f. o. b. Philadelphia.

10-ton Creamery Package Plant, complete; high and low side, horizontal, belt driven, \$1000 f. o. b. Philadelphia.

55-ton Vilter Machine, Corliss drive; perfect condition, cheap.

3-Tubular Boilers, 60", 66" and 72".

Ice Cans, Tank, Filters, Hoists, Condensers, Coolers, Frick Accumulator, Machines (all makes), some steam and belt-driven.

We have three good investment propositions—Ice Plants, Buildings and Business. B. o. k. s. open for investigation.

## BERRYMAN'S REFRIGERATING MACHINERY EXCHANGE

The Bourse, PHILADELPHIA, PA.

## Railroad and Contractors' Equipment and Supplies.

### DUMP CARS AND LOCOMOTIVES

11-12-yd. Western Dump Cars, excellent condition, each.....\$1,050.00  
 1-Standard Gauge Locomotives:  
 1-50-ton 6-wheel Switcher.....6,500.00  
 1-40-ton 6-wheel Switcher.....10,000.00  
 1-30-ton 4-wheel Switcher.....5,500.00  
 All excellent condition, ready for immediate service.

THE FRED R. JONES CO., City Hall Square Building, CHICAGO

## FOR SALE

### 10-INCH SUCTION DREDGE

Operated by Oil Engines  
 Fairbanks Morse 100 H. P.  
 Fully equipped 750 feet pipe, pontoons, and necessary fittings all in good condition ready to operate; can furnish crew for immediate work.

ADDRESS

OWEN BURNS Sarasota, Fla.

### For Sale

### Two-Worm Geared CRANE TRUCK LADLES

1200 pounds capacity for 24" gauge track; height from top of bowl to track 43½ inches. Price \$110 each f. o. b. La Crosse. Address

LA CROSSE TRACTOR CO.  
La Crosse Wisconsin

### FOR SALE

One Bucyrus 55-ton Steam Shovel, with 2-yd. dipper, mounted on M. C. B. car. Several rebuilt Oil and Gasoline Stationary and Traction Engines. One J. I. Case Steam Tractor, 20 H. P. on the draw bar, 60 H. P. on belt. Engines, Boilers, Woodworking Machinery.

SIMMONS-BIGGS COMPANY, Inc.  
MEMPHIS, TENNESSEE

### HIGH SPEED

## STEAM HOISTING ENGINE

Double-cylinder, single-drum, high-speed Hoisting Engine; built especially for handling material elevators, etc., but suitable for any kind of hoisting or haulage where high speed is desired.

It will hoist 1500 pounds at the rate of 400 feet a minute.  
 Drum 16 inches in diameter and 23½ inches long between flanges, mounted on the crank shaft, and operated by a cone friction. Cylinder size, 7x10; has a 39x85 boiler and ample brake surface.

Price on request—and it is a real bargain price.  
 Immediate shipment.

AMERICAN HOIST & DERRICK CO.  
ST. PAUL, MINN.

## AUSTIN TRENCHING MACHINES FOR SALE OR RENT

- 1-Gasoline "00," 2 years old, cut 30"x12" trench.
- 1-Gasoline "00" Special, 2 years old, cut 30"x14" trench.

H. W. CARDWELL CONSTRUCTION CO.  
PORT ARTHUR, TEXAS

## FIRST—Get Bulletin 237—or, wire ZELNICKER IN ST. LOUIS

Before buying or selling

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LOCOMOTIVES — CARS — TANKS  
MACHINERY, PILING, ETC.  
What have you for sale?

## AIR COMPRESSORS AND TANKS

Steel Derrick Car, Derricks, Dredge Buckets, Engines and Pumps.

A. B. CLARK COMPANY  
225 Fifth Avenue NEW YORK

## Tampa Machinery Exchange TAMPA, FLA.

Buy, Sell and Exchange Machinery  
of All Kinds

WRITE US YOUR WANTS



# LOCOMOTIVES AND CARS

## Immediate Delivery

### STANDARD GAUGE

No.	SADDLE TANK TYPE	
1	1-10x14 Davenport	\$2,500.00
3	1-11x16 Baldwin	4,000.00
5	1-14x20 Porter	2,500.00
7	1-16x24 Rogers	9,000.00

### FORNEY

8	1- 9x12 Manhattan	1,500.00
9	1- 9x14 Vulcan	2,000.00
10	1-12x22 Baldwin	5,000.00
11	1-13x18 Davenport	6,250.00
12	1-18x24 American	7,500.00

13	1-20x24 N.&W. Class "G," Consolidated	10,000.00
14	1-19x24 Baldwin, 10-Wheeler	8,000.00
15	1-13x18 Porter Mogul	8,000.00
16	1-17x24 Rogers Mogul	7,000.00
17	1-17x24 Penna. Mogul	5,000.00
18	1-18x24 Rogers Mogul	8,500.00
19	1-18x24 Penna., 10-Wheeler	6,000.00
20	1-15x22 Penna. 6-Wheel Switcher	4,000.00
21	1-16x24 Baldwin Switcher	4,500.00
22	1-18x24 Baldwin, 10-Wheeler	6,000.00
23	1-18x24 Baldwin, 10-Wheeler	6,000.00
24	1-15x22 Baldwin, 4-Wheeler	3,500.00

### GEARED

25	1-20-Ton Shay, 1907	3,500.00
26	1-20-Ton Shay, 1912	4,500.00
27	1-18-Ton Climax, 1908	3,500.00
28	1-50-Ton Davenport, 1913	10,000.00
29	1-80-Ton Shay, 1915	13,500.00

### 36" GAUGE

No.		
30	1-10x16 Baldwin Mogul	\$2,000.00
31	1-14x18 Brooks Mogul	5,500.00
32	1-13x20 Baldwin Prairie (new)	14,000.00

### SADDLE TANK

33	1- 9x14 Davenport	1,750.00
34	1- 9x14 Porter, 6-Wheel Switcher	2,500.00
35	1-11x16 Porter (like new)	3,500.00

### GEARED

36	1-20-Ton Climax	4,000.00
37	1-10-Ton Shay	1,500.00
38	1-15-Ton Shay	1,750.00
39	1-50-Ton Shay	5,500.00

### CARS

#### Standard Gauge

	Each
25-60,000 Capacity Flat Bottom Gondolas	\$750.00
75-6-Ton Center Dump Coal Cars	75.00
16-50,000 Capacity Box Cars	450.00

### LOCOMOTIVE CRANES

1-18-Ton O. & S. Wheel	\$20,000.00
1-10-Ton Browning, 4-Wheel	10,000.00

Also All Weights of Rail

## THE GEORGE B. CURD COMPANY

2413 Union Central Building, CINCINNATI

Car and Locomotive Shops, CINCINNATI

Branch Office: 1306 Third National Bank Building, ATLANTA, GA.

### SHOVELS CARS LOCOMOTIVES

- 1-18-B Bucyrus Steam Shovel, traction, with 3/4-yd. dipper. Has as extra equipment a 40-ft. boom and 3/4-yd. P. & H. single-line clam shell bucket. Practically new and available for immediate shipment.
- 1-Standard 70-ton Bucyrus, 2 1/2-yd. dipper, entirely rebuilt recently by Bucyrus Co. Price \$7500.
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- 10-12-yd. Western Dump Cars, steel frames, first-class. Price \$900 ea.
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- 1-32-ton Saddle-Tank Baldwin, standard gauge, 15"x24" cylinders, air brakes, 150 lbs. working pressure. In fine shape. Price \$5500.
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Contractors—Engineers

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- 1 Dipper Dredge; deck 28'x60'15"; 14-hp wood engine, size 72, cylinders 12"x14", has 58' boom, 12"x14", long-leaf pine; has two one-yard buckets, clamshell and one orange-peel.
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Both dredges are in perfect condition ready to operate. No repairs required. Located New Jersey.

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Complete line Rebuilt Steam and Electric Hoisting Engines. Also Compressors, Mixers, Derricks, etc. Write for list.

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A large list of necessary equipment for cleaning Rods, Sewer Jacks to Traps and Machines.

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## NEW MINE LOCOMOTIVES

2 Brand-New Jeffrey 15-ton Haulage Locomotives, 250 volts D. C., two-motor type, single and control, inside wheels, gauge 44", double-end equipment of arc headlights; immediate shipment.

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One 13-ton Jeffrey, 42" gauge, 250 volts D. C., two-motor type, steel-tired wheels, single and control; used only three weeks; an attractive price; immediate delivery.

One 10-ton Jeffrey.

One 10-ton General Electric.

One 12-ton Westinghouse.

All 500 volts D. C., 42" gauge, steel-tired wheels, single and control, armor-clad type, in excellent condition. Each motor has a large allotment of new repair parts that goes with the sale. Immediate delivery is offered on any of these locomotives.

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50 sets for 42" gauge track, Whitney Wonder roller bearing 16" wheel. All iron, complete, ready for body. Brakes to all wheels. 1½-ton capacity level full. Immediate delivery from W. Virginia point.

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GENERAL OFFICES:  
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- 1—10x12 D. C. D. D. American Hoist & Derrick Company Engine with boiler.
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Have you received a copy of Louer's Red Book? A complete catalogue of new machinery which should be on your desk for immediate reference. It is yours for the asking.

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Three Watson, five-ton, steel and asbestos lined trailers. Used one month. Located at Charleston, West Virginia. Will sell for \$700 each.

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Railroad Contractors' Equipment

Consisting of 3 standard gauge and 1 36" gauge Locomotives, 1 15-ton and 1 55-ton Bucyrus Steam Locomotives, 60 6-yard standard-gauge Dump Cars, 2 large Ingersoll Air Compressors, with boilers and reversers, etc., etc.

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Hand Imperial, type No. 11, 400 feet, Belted Air Compressor.

Chicago Pneumatic Portable Gasoline-driven Air Compressor, 195 cu. ft., type 1P-6.

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American Moistening Co. system, consisting of 23 of the latest-improved sectional heads, with all piping connections and fast triplex power pump. These humidifiers are especially adapted for cotton mills. Will name at a bargain price. Good as new.

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Marion Shovel, Model 61.  
Marion Shovel, Model 60.  
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Immediate delivery; all in splendid condition and ready for work.

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16 H. P. O. & S. D. C., D. D. Hoist, with Boiler.

50-ft. Steel Two-Section Steam Shovel Boom for clamshell work.

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One 8-horse-power Byers Hoisting Engine, with boiler and stack, in good condition, recently repainted, single cylinder, single drum, reversing type, together with 350' of Cable and Elevator, about 5'x6", in good condition.

Price of above equipment complete \$300 f. o. b. cars Huntington, W. Va.

THE H. T. LAMBERT CO.  
P. O. Box 346 Huntington, W. Va.

## STEAM SHOVELS

70-C Bucyrus, 3-yard dipper.

50-Atlantic type Bucyrus. NEW.

## LOCOMOTIVES

10x16" Porters, Vulcan, Davenport.

## CARS

15-6-yard K. & J. Standard Gauge.

6-2-yard 36" Gauge, "V" shape.

115-36" Gauge 1½-ton Low-Vein Mine Cars.

## BOILERS

1-125 H. P. Portable.

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Verticals in sizes 5 to 50 H. P.

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Just purchased the following:

8½x10" D. C. D. D. American, with Ohio boiler.

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1-1500 ft. per minute Straight-Line Ingersoll.

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1-350 ft. per minute Duplex Laidlaw-Dun-Gordon.

2-100 ft. per minute Mounted, gasoline driven.

Impossible to list our entire equipment; therefore, wire, write or phone and we will see that your wants are taken care of. No trouble to show our stock.

Pittsburgh Machinery & Equipment Co.

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## GOOD LOCOMOTIVES

(Direct from Owners)

Two standard-gauge, 40-ton Baldwin six-wheel Switch Engines. Cylinders 17"x24". Steam pressure 150 pounds. Air brakes. Sloping eight-wheel tenders. Ready for work.

One 19"x26" Baldwin 10-wheeler. Weight on drivers 45 tons. Steam pressure 160 pounds. Just completely overhauled and a bargain.

One 16"x24", 40-ton Passenger Engine. One small standard-gauge Saddle-Tank Engine, about 20 tons.

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1-10-ton Kelly 3-wheel Steam Roller.

1-Pulsometer Pump.

1-10x20 Acme Stone Crusher, 20' folding elevator, 50-ton stone bin.

1-Aurora 9x16 Stone Crusher, with 24' folding elevator.

1-No. 3 Gyratory Crusher.

All other kinds of Contractors' Machinery.

The W. M. T. JOHNSTON COMPANY, Inc.

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## FOR SALE

One Brown Corliss Engine, 14x36, in splendid condition.....\$750

Line of Shafting, with bearings.....100

55 ft. Double Leather Belt, 17 in. wide and very good. Sold only with engine.. 150

One Horizontal Tube Boiler, 60 in. x 18 ft., 44 lbs. in good condition.....300

Address J. ANDREW CAIN Versailles, Ky.

## BOILER

40 H. P. Oil Country Locomotive Type, lap-weld, 44" diameter, 60 3" flues; good for 100 lbs. pressure; complete with 40' 26" smoke stack, fire grates, but no other fittings. f. o. b. cars Springfield, O. \$375.

LOCOMOTIVES, STEAM SHOVELS, HOISTING ENGINES, TRACK, ETC.

T. J. LANE EQUIPMENT CO.

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## McMyler Whirley

50' boom, 1½ yd. clam shell, 16' gauge, 9x12 engines, 60" diameter boiler, revolving, in fine condition. Immediate Shipment. Price \$5,000.00.

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Moore Bros.

39 South La Salle Street  
CHICAGO ILLINOIS

IRON AND STEEL  
PULLEYS  
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Lot of slightly used iron and steel pulleys—all sizes.

Foltz Mfg. & Supply Co.  
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## QUARRY MACHINERY FOR SALE

We are offering our entire quarry equipment for sale, consisting of two 30 H. P. Boilers (good steam); two Hoisting Engines; two Steam Drills; 3000 ft. 1½" Wire Cable; Slate-Dressing Machines; Steel Wire Hoisting Ropes; Guy Ropes; Tools of every description necessary to operate a slate quarry.

A. L. PITTS SLATE COMPANY. Arvon, Va.

## Equipment For Sale

2 Locomotives, standard gauge.

2 Locomotives, 24" gauge, steam.

50 Koppel Cars, 24" gauge, 1½-yd.

4 miles Koppel Track, 24" gauge, 20-lb.

1 Port Huron Roller, 3-wheel.

5000 ft. Helzel Steel Forms, 6".

1 Holt Caterpillar Tractor, 60 H. P.

2000 ft. 6/7 1" Rope, hemp center.

1 Generator, A. C., 100 K. W., with exciter.

2 Goodman Motors, 160 H. P., 250 volts.

20 Dump Wagons, Western, 1½-yd.

5 Trailers, Port Huron, 5-yd., all steel.

DANIEL B. STRALEY

CROWN POINT, INDIANA



# Special Attention!

# LOCOMOTIVE CRANES

FOR PRACTICALLY IMMEDIATE SHIPMENT

- 1—30-ton, 8-wheel Industrial Works Locomotive Crane, 60-ft. boom with 15-ft. and 25-ft. extensions to 100-ft. boom. Right out of our works. Completely overhauled.
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- 1—20-ton 8-wheel McMyler Locomotive Crane, 50-ft. boom, etc. Very fine machine. Right out of our shops.
- 1—15-ton, 4-wheel Browning Locomotive Crane, 38-ft. boom etc., just overhauled, immediate shipment.
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Also considerable other equipment. All quotations subject to prior sales. Please telegraph, telephone or write us your requirements.

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*Locomotive Cranes, Cars, Locomotives, Steam Shovels, Etc.*

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### Special—Immediate Delivery MACHINERY FOR MOVING MATERIALS

#### STANDARD GAUGE LOCOMOTIVES

- 5—Vulcan 4-wheel 12"x16" Saddle Tanks, weighing 25 tons.
- 2—American 4-wheel 14"x24" Saddle Tanks, weighing 35 tons.
- 1—American 4-wheel 17"x24" Slope Tender, weighing 40 tons.
- 1—Baldwin 4-wheel 18"x24" Slope Tender, weighing 50 tons.
- 1—American 6-wheel 17"x24" Slope Tender, weighing 45 tons.
- 1—Baldwin 6-wheel 17"x24" Slope Tender, weighing 50 tons.
- 2—American Moguls, 18"x24", Square Tender, weighing 55 tons.
- 1—Baldwin Mogul, 19"x26", Square Tender, weighing 65 tons.
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The above locomotives have been thoroughly overhauled.

#### 36" GAUGE LOCOMOTIVES

- 6—Porter 4-wheel 9"x14" Saddle Tanks, contractors' type.
- 2—Vulcan 4-wheel 9"x14" Saddle Tanks, contractors' type.
- 3—Vulcan 4-wheel 10"x16" Saddle Tanks, contractors' type.
- 6—Porter 4-wheel 11"x16" Saddle Tanks, contractors' type.
- 1—Baldwin Consolidation 15"x20" Square Tender, weighing 38 tons.
- 1—American Forney, 10"x16", weighing 25 tons, 2-4 type.
- 2—Vulcan 10-wheel 14"x20" Square Tenders, weighing 35 tons.

#### STANDARD GAUGE CARS

- 50—Flat Cars, 50,000-pound capacity, 35' long, M. C. B.
- 30—Flat Cars, 60,000-pound capacity, 35' long, M. C. B.
- 42—Gondolas, 30,000-pound capacity, 35' long, M. C. B.
- 25—Hoppers, 60,000-pound capacity, 28' long, M. C. B.
- 23—Box Cars, 60,000-pound capacity, 36' long, M. C. B.
- 2—Steel Flats, 100,000-pound capacity, 40' long, M. C. B.
- 13—Oliver Dump Cars, 12-yd. capacity, 23' long, M. C. B. air brakes.

#### RAIL

500—tons 45 and 50-lb. Rail.

We also have several Air Compressors, Air Pumps, Tanks, Rock Crusher, etc. Will rent a large portion of this equipment at reasonable rates.

HOISTING MACHINERY CO., 50 Church St., NEW YORK CITY

#### HOISTING ENGINES (Steam)

- 1—Flory, 10"x12", Double Cylinder, Single Drum, without boiler.
- 1—Flory, 9"x10", Double Cylinder, Double Drum, with boiler.
- 2—Lidgerwood, 8 1/4"x10", Double Cylinder, Double Drum, with boiler.
- 2—Stroudsburg, 8 1/4"x10", Double Cylinder, Double Drum, with boiler.
- 1—Flory, 10"x12", Double Cylinder, Double Drum, with boiler.
- 4—Lidgerwood, 7"x10", Double Cylinder, Double Drum, without boiler.
- 3—Mundy, 5 1/2"x10", Double Cylinder, Double Drum, with boiler.
- 2—Lidgerwood, 6 1/4"x8", Double Cylinder, Double Drum, with boiler.
- 2—Lidgerwood, 5"x8", Double Cylinder, Double Drum, with boiler.
- 1—Lidgerwood, 8 1/4"x10", Double Cylinder, Double Drum parallel, without boiler.
- 1—Crook, 8 1/4"x12", Double Cylinder, Double Drum, without boiler.
- 1—Mundy, 6 1/4"x12", Double Cylinder, Double Drum, with boiler.
- 1—American H. & D., 7"x10", Double Cylinder, Double Drum, with boiler.
- 1—Flory, 7"x10", Double Cylinder, Double Drum, with boiler and swinger.

These hoists are all in fine shape, ready to go to work.

#### HOISTS (Electric)

- 1—3-Drum, with swinger, 150 H. P., A. C. motor.
- 1—3-Drum, with swinger, 75 H. P., D. C. motor.
- 1—Double Drum, 100 H. P., D. C. motor.
- 1—Double Drum, 50 H. P., D. C. motor.
- 2—Double Drum, with swinger, 30 H. P., D. C. motor or A. C. motor.
- 9—Double Drum, with swinger, 25 H. P., D. C. and A. C. motor.
- 3—Single Drum, with swinger, 25, 37 and 5 H. P., A. C. motor.

#### DERRICKS

- 1—Steel Guy, 65' mast, 54' boom, complete with guys, etc.
- 1—Steel Guy, 100' mast, 85' boom, complete with all fittings.
- 1—Steel Stiff Leg, 50' mast, 80' boom, complete with all fittings.
- 2—Steel Guys, 80' mast, 70' boom, complete with all fittings.

Also several Wooden Stiff-Leg and Guy-Derricks and Travelers.

#### BOILERS

- 1—150 H. P., locomotive type.
- 2—65 H. P., locomotive type.
- 2—40 H. P., locomotive type.
- 10—165 H. P., vertical type.

### HOISTING ENGINES

- 1—Lidgerwood, 14x18, D. C., three tandem drum, suitable for cable.
- 1—Shannon, 7 1/4 x10, D. C., D. D., with boiler.
- 1—Mundy, 6 1/4 x10, D. C., D. D., skeleton.
- 2—Mundy, 6 1/4 x10, D. C., D. D., with boilers.
- 1—National, 5 1/2 x10, D. C., D. D., with boiler.
- 1—Mundy, 8x12, double cylinder, three tandem drums, butt strapped triple riveted, boiler, independent Mead Morrison 4 1/2 x6 swinging engine, equally as good as new.

### STATIONARY ENGINE

- 1—350 H. P. Green Slide Valve Engine, equally as good as new, in 22"x48" wheels 16"x32".

### BOILERS

- 3—American-built, Scotch type marine boilers, 12'6" dia. by 20' long, double end, three corrugated furnaces each end, 100 lbs. steam.
- 1—350 H. P., horizontal return tubular Boiler, 125 lbs. steam.

### ANCHORS

- 10—New mushroom Anchors, 5000 lbs. each.

### PIPE

- 6000 ft., strictly first-class 6" wrought-steel Pipe, equally as good as new.
- 700 ft. strictly first-class 20" dia. steel-riveted flange Pipe, lengths 3' each.
- 400 ft., 24" dia., 30' lengths, equally as good as new.

### STEAM SHOVELS

- 1—65-ton Bucyrus, 2 1/2-yd. dipper, standard gauge.
- 1—No. 1 Thew Traction Steam Shovel, 3/8-yd. dipper.

### CENTRIFUGAL PUMPS

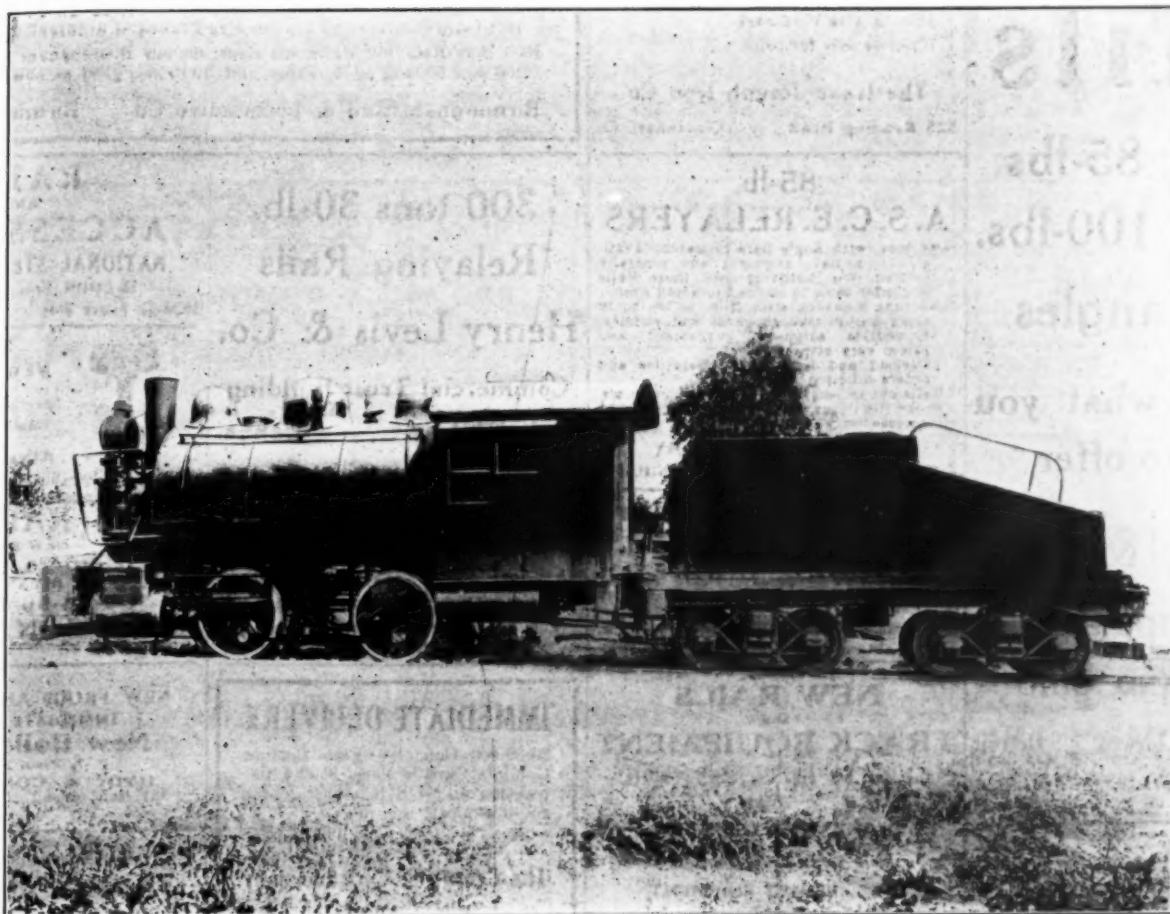
- 1—Morris No. 12, 14" suction, 12" discharge, direct connected to horizontal engine, 18x10, 4500 gallons capacity per minute.
- 34—Standard gauge car trucks, four wheel; wheels 34" dia., in first-class second-hand condition.

### RAILS

- 600 tons strictly first-class, 30-lb. relaying rails with 4-hole angle bars. We have a large tonnage of all weight rails from 20 to 100 lb. relaying, pass any inspection.

- 1—Logging Engine, size 7x10, D. C., D. D., with boiler.
- 1—36" gauge, 28-ton Climax Locomotive, North Carolina delivery.

**Henry A. Hitner's Sons Co.**  
Station K. Philadelphia, Pa.



## AMERICAN-SCHENECTADY FOUR WHEEL SADDLE TANK SEPARATE TENDER SWITCHING LOCOMOTIVE

GAUGE .....Standard  
CYLINDERS .....16x24  
FUEL .....Coal  
DRIVERS .....Diam. 40"  
WORKING PRESSURE.....175 lbs.  
BOILER .....Diam. 48"  
TYPE .....Straight  
FIRE BOX.....42"x35"

TUBES .....148 2" diam. x 12' 6" long  
ENGINE WHEELS.....Four  
TENDER (kind).....Sloping  
WATER CAPACITY.....3000 gals.  
FUEL CAPACITY.....4 tons  
No. of WHEELS.....8  
DIAM. ....30"

**Engine built 1910. Used very little. Carries 175 lbs.  
steam pressure. Immediate shipment.**

Also a large stock of Cars, Rails, Steam  
Shovels, Hoisting Engines,  
Derricks, Concrete  
Mixers, etc.

**Attention, Government Contractors**  
We cater to Contractors by leasing  
equipment for Government  
work.

**Contractors Machinery & Supply Co.**  
**509 Wabash Building** **PITTSBURGH, PA.**



# Wanted Rails

80-lbs. 85-lbs.  
90-lbs. 100-lbs.

with angles

Wire us what you  
have to offer

**The Fishel & Marks  
Company**

CLEVELAND, OHIO

Pittsburg Chicago Detroit

## STEAM SHOVEL

Thew, 1 1/2 yd. dipper, traction wheels; very little used; good as new.

## HOISTING ENGINES

Lidgerwood, 7x10 in., 20 H. P., D. C., D. D. Derrick Hoist, with boom swinger.

Lidgerwood, 3x10 in., 25 H. P., D. C., D. D. (R.L.M.) levers in quadrant.

## LOCOMOTIVE

24-inch gauge Vulcan, 7x12 inch, 9-ton, four-wheel, saddle tank; new in 1914; used six months.

## CONCRETE MIXER

Smith, size No. 10, with gasoline engine on wheels; first class.

## RAILS

New and Relays,  
50 to 100 lbs. per yard.

**E. C. SHERWOOD**

50 Church St. New York

## LOCOMOTIVE

### FOR SALE

One 18-ton 36" gauge Shay Geared Locomotive, in good running order; must be moved at once. We will sell for \$900 f. o. b. cars Norman, N. C.

**L. BRENNER & COMPANY**  
LEBANON, PA.

## 5-Ton Cupola

with or without blower; no reasonable offer refused; outfit in good condition, being replaced by larger unit. Can be seen at

**KENNEDY FOUNDRY COMPANY**  
Charles and Wells Sts. Baltimore Md.

## FOR SALE

1-National D. D., D. C., 6x10 Hoisting Engine complete.

1-Byers D. D., D. C., 6x9, complete.

1-Thew Auto. Revolving Steam Shovel, 1 1/2 yd. dipper, standard gauge, condition good. \$5000.

## SABEL & ROTHCHILD

770 W. Bay St. Jacksonville, Fla.

## FOR IMMEDIATE DELIVERY

## One-Mile Tramway & Equipment

3600-ft. x 1 1/4-in. Locked Coil Track Cable.

5280-ft. x 3/4-in. Locked Coil Track Cable.

10,650-ft. x 3/4-in., 6/7 C. C. Steel, Lang Lay.

4500-ft. x 3/4-in., 6/7 Plow Steel, Lang Lay.

2/3000-ft. x 1-in., 6/7 Scotch Plow Steel, Lang Lay.

750-ft. x 2-in. 6/19 Plow Steel, Anchor Weights and Carriacens.

576-ft. x 2-in. Flatwire, C. C. Steel, Anchor Weights.

30-ton Steel Wire Rope, 3/4 to 1 in.

10-ton Galvanized Guy Rope, 3/4 in. to 1 1/4 in.

2000 Steel and Wood Blocks, 6 in. to 20 in.

10 Steel Blocks, New, 18-in. for 1-in. Wire Rope.

10-Ton Bridge and Sling Chain, 3/4 in. to 1 in.

2 Ton Mauls, 8 to 30-lb.

1-ton Stone Dogs (Heavy).

All First-Class Second-Hand Condition Your Inquiries Solicited

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## Relaying Rails

We have for immediate shipment:

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Complete, with splice bars.

Atlanta (Ga.) delivery.

Write or wire for price.

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16,000 tons, with Angle Bars to match. Available immediate shipment and centrally located. We positively own these Rails and offer same in carload lots and over. 25,000 tons Relayers, sizes 25-lb. to 100-lb., in stock our Pittsburgh yards and vicinity. Immediate shipment guaranteed and prices very attractive. Carload and less carload inquiries and orders solicited.

Rails cut to length for structural purposes. Frogs, Switches, Bolts, Nuts, Spikes and all accessories.

**L. B. FOSTER COMPANY**

Park Building PITTSBURGH, PA.

## Relaying Steel Rails

25-lb., 40-lb., 56-lb., 60-lb., 70-lb., 80-lb., 85-lb., and Angle Bars to lay same, also other weights; and NEW STEEL RAILS, all weights; We handle first-class Relaying Rails. We buy Rails fit to relay, and pay spot cash.

**ROBINSON & ORR, Pittsburgh, Pa.**  
Low Prices on New FROGS and SWITCHES.

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12 lbs. TO 100 lbs. PER YARD

also

FROGS & SWITCHES BOLTS & NUTS  
ANGLE BARS ETC. TIE PLATES

FOR PROMPT SHIPMENT

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## RELAYING RAIL FOR SALE

Approximately 50 tons 12 lb. relaying rail, 100 tons 16 and 20 lb. relaying rail for prompt delivery.

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## RAILS

FOR SALE

A large tonnage of rails consisting of all sizes.

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One No. 3 Gates Gyratory; complete, fine shape.

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One 11"x22" Acme Jaw Crusher; fine shape.

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One 10"x20" Farrell Jaw Crusher; fine shape.

One 9"x16" Indiana Jaw Crusher on wheels.

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Locomotive, Steam Shovels, Locomotive Cranes, Cars,  
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40 Standard and 36" gauge modern direct-connected Locomotives in all types and weights from 8 to 75 tons.

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15 Steam Shovels and Locomotive Cranes of different types and sizes.

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100 sets 35 and 40-lb. Frogs and Switches, good as new.

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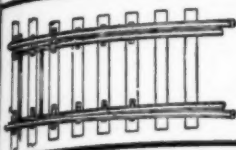
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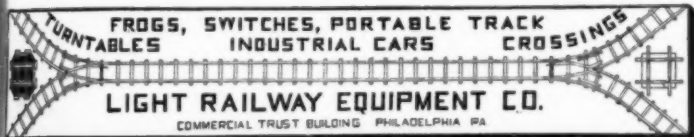
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1-20-ton Brown Hoist, 8-wheel, M. C. B., 45-ft. boom, 2-yard Brown Hoist clam-shell bucket, outriggers, air brakes, 54-inch butt-strapped boiler.  
1-20-ton McMyler, 8-wheel M. C. B., 60-ft. boom, bucket-operating drums; 54" boilers, butt-strapped.

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1-Baldwin, 30-ton, saddle tank, standard gauge, type 0-4-0.  
2-Baldwin standard-gauge, saddle tanks; one 33-ton, the other 35-ton; cylinders of both 14x24; four-driver type; Hunt's inspection certificate of approval furnished.

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Ingersoll-Rand duplex, two-stage, steam driven, capacity 1190 ft. air at 110 lbs. pressure.

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Closed Steel Upright Storage Tank, 10 cu. ft. capacity, mounted on trucks, with side loading platform.

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4-1-yard capacity "V"-shaped, steel Two-Way Dump, 30" gauge.

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2-Marsh-Capron 1/2-yard, with steam engines and boilers mounted on wheels; charging hoppers or side loaders.  
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1-No. 4 Smith, with steam engine on skids.  
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Lambert, 10x12 double cylinder, single drum, 36-in. dia., 24-in. face; drum grooved; will take up 3/4-in. cable; drum flanges 8" deep; link motion.

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1-American 5 1/2x8 double cylinder, double drum, with boiler and swinging gear.  
1-American 7x10 double cylinder, double drum, with boiler.

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1-40 K. W. General Electric, direct connected to Ball engines; complete with all apparatus, 125/250 three-wire.

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137-4-yard Western Cars, 36-in. gauge, steel and wood beam.

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Can make prompt deliveries anywhere.  
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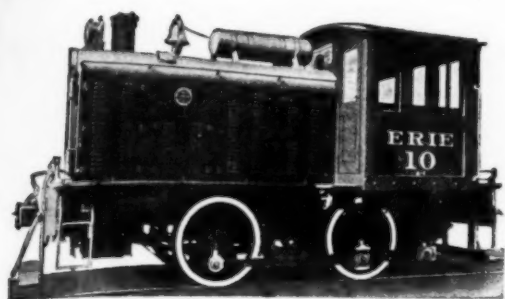
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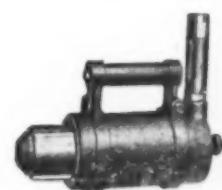
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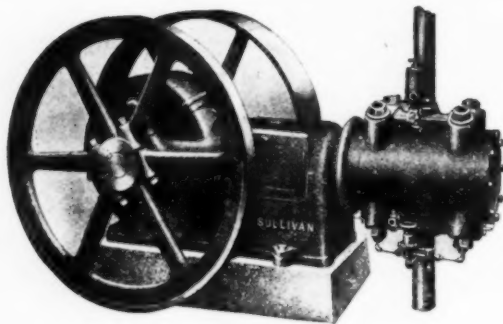
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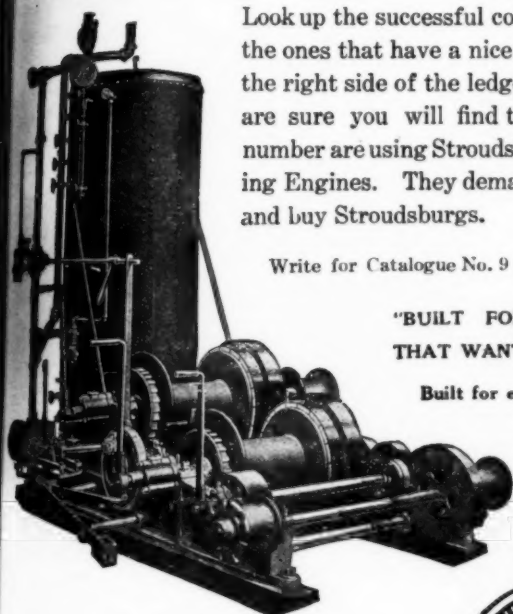


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Name your work and we'll show you an Auto-Crane doing similar work.

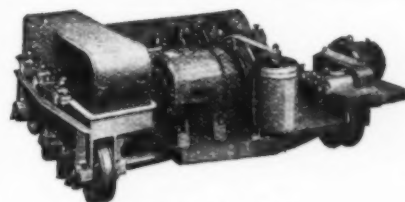
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Type "R" Electric Crane Trolley  
All gears totally enclosed, running in oil.

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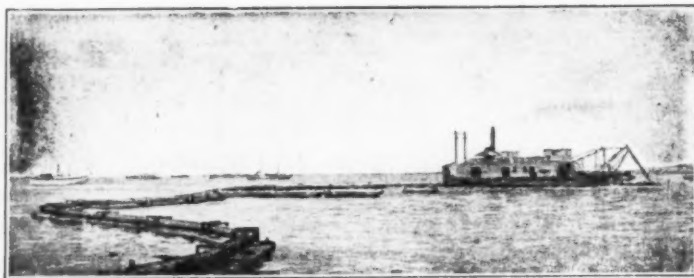
The kind needed for mines, quarries, harbor and river improvements, contractors' use, etc. Extra large drum shafts, smooth-turned winch heads, independent clutch winches and other special features, resulting from years of study and actual practice.

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**River and Harbor Improvements,  
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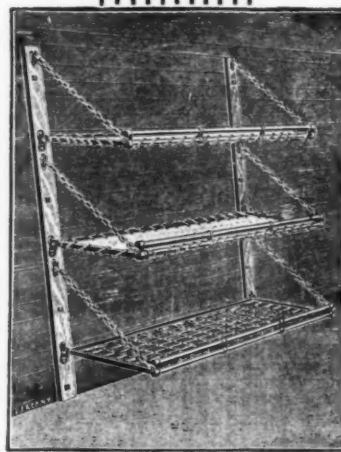
NEW YORK      MANILA, P. I.      MOBILE, ALA.

## Contractors Give Your Men A Good Night's Rest

Contented workmen are a big asset. Give them a good night's rest on a comfortable bunk, and they will wake up in the morning ready to pitch in for a good hard day's work.

## ROMELINK BUNKS

are strong and substantial. They are built of the best grade Steel and Iron; are absolutely sanitary; won't burn; cheaper in the long run than wooden bunks, take up little room and can be carried from job to job.



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W. S. S. COST DURING 1918					
April	4.15	July	\$4.18	Oct.	\$4.21
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On the every-day job B. & B. Wire Rope has in reserve a great store of strength and stamina. It's in the emergency that the true worth of B. & B. Wire Rope is evident.

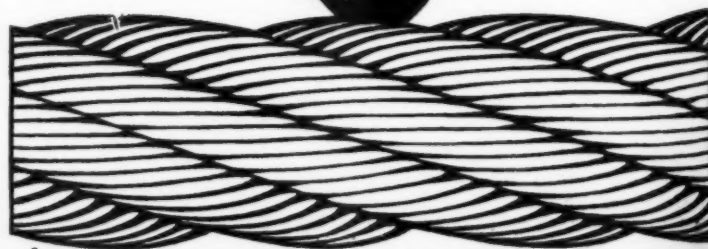
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**THEW ON FINE STREET GRADING**

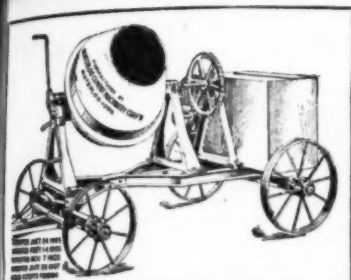
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Manufacturers of 6 sizes—60 combinations of power shovels, built of Thew Standard Machinery Units, equipped with Combination Boom, Skipper Shaft or Horizontal Crowd—Steam, Gasoline, Electric.

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### "The Mixers that Make the Money"


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MIXERS PAVERS HOISTS PUMPS BACKFILLERS  
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First aid to overworked labor and overburdened payroll. Self-contained, easily and fully controllable, speedy digging and rehandling machine for indoor or outdoor use. Hooked up in a jiffy to any lifting machine. Catalog 42.

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**ERIE MACHINE SHOPS**  
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### Steel Derricks and Concrete Placing Equipment

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ERIE Shovel owned by  
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In this quarry,  
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\$70 a day

"The ERIE Shovel replaces 25 men in this quarry," says B. J. Bixby, Supt., **WHITE OAK CRUSHED STONE CO., New Britain, Conn.** "It saves more than \$70 a day, after deducting all shovel expenses—including depreciation and interest."

"We have a hard trap rock in this quarry, and we need the compact and durable build of the ERIE. It is a perfectly balanced shovel."

How many men do YOU employ on work that a steam shovel could do much cheaper? Even if you have only 15 men loading rock or digging earth, you can probably save money by using an ERIE Shovel. And you will be assured of steady output.

The ERIE is the RELIABLE steam shovel. Built to work steadily when digging rock.

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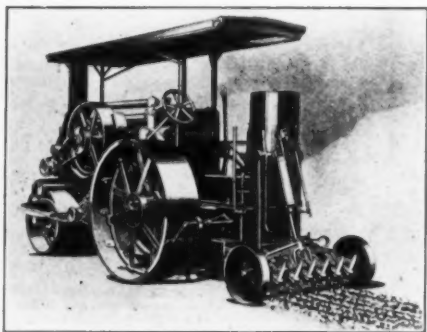
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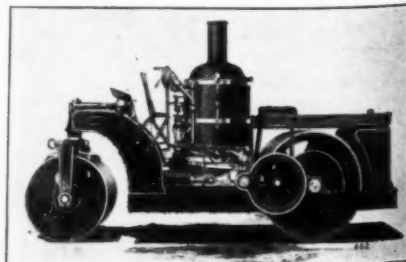
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Like the automobile, people are realizing their necessity. Progressive towns and automobile associations realize their advertising value and general good they are to the community and public at large.

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Not Experiment But Experience  
dictates the choice of  
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Accept No Substitutes  
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For Concrete, Reinforcing and Roofing Gravel. Railroad  
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It means that "ACME" Culverts are made of practically pure metal.

It means long service. Thousands of feet have now been in the ground for ten years or more without appreciable deterioration.

It means all-round culvert satisfaction for you.

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## Our roads MUST be kept in good repair



Two Men can install a long length of  
"ARMCO" Iron Culvert.

An important consideration in these days when labor is scarce and high-priced.

For full information on "ARMCO" Iron Culverts,  
Tanks, Street and Road Signs, Sheets, Roofing  
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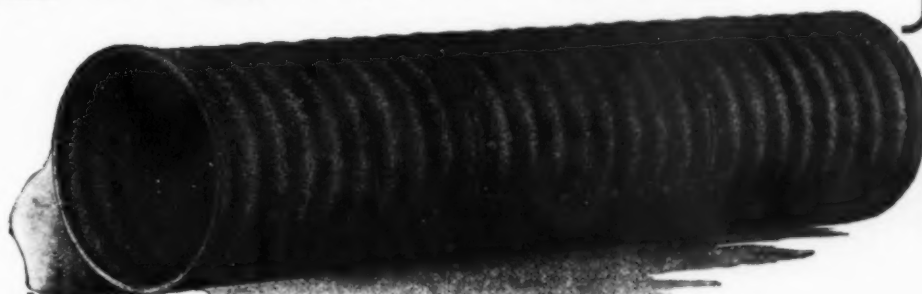


NOT A MOMENT  
must be lost—good roads  
in war time are vital.

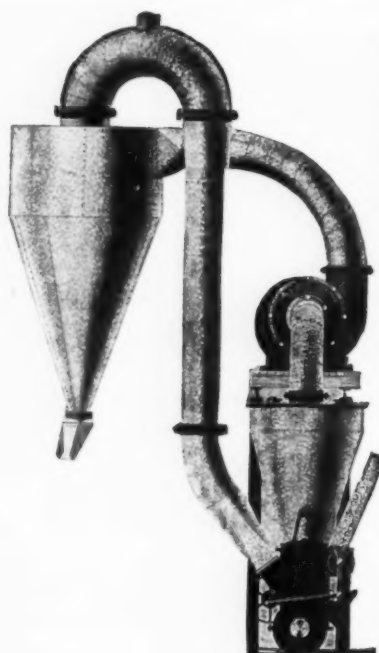
Any delay in getting the product of the farm to the cities and seaports slows up our fighting men, our allies and the millions of workmen in countless factories that supply food, clothing, equipment and munitions to our troops.

THIS YEAR the farm wagons and country roads will be called upon to carry to the railways the greatest burdens they have ever known.

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### Pulverizing Machinery Equipped with Air-Separation for the Fine Grinding of All Dry Materials to a Powder

We have perfected the Air-Separation principle which takes the place of your expensive screening and bolting machinery. This Air-Separation is applied direct to the pulverizing mill so that as fast as the material is reduced

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Air-Separation is more economical than screens for producing fine materials, and by applying it direct to the pulverizing mill you obtain the added advantage of a complete unit which takes one-inch material, and delivers a finished, powdered material to storage.

An investigation of these statements will lead you to send for our catalog and full information as to how the Raymond System can be applied to your grinding requirements.

**Raymond Bros. Impact Pulverizer Company**  
1304 N. Branch St. Chicago, Ill.

Western Representative:  
The Dry Milling Engineering Co., 204 Boston Bldg., Denver, Col.

### The Fuller-Lehigh Pulverizer Mill

A Complete Self-Contained Grinding Unit



The Most Economical Mill for Producing  
Agricultural Limestone,  
Ground Phosphate Rock,  
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Industrial Furnaces.

Reduces lump material to 20, 40, 60, 80, 100  
or 200 mesh without requiring any outside  
accessory equipment.

Descriptive Catalogue Upon Request.

**FULLER-LEHIGH COMPANY**

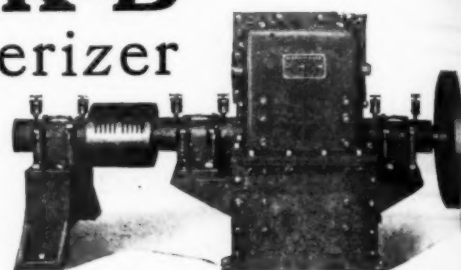
Successors to Lehigh Car, Wheel & Axle Works

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Branch Offices: New York, N. Y., 50 Church Street Chicago, Ill. McCormick Building

### The K-B Pulverizer

is  
Strong  
Safe  
Sturdy  
and Saves  
Power



Crushes 3-inch pieces to dust in one operation.

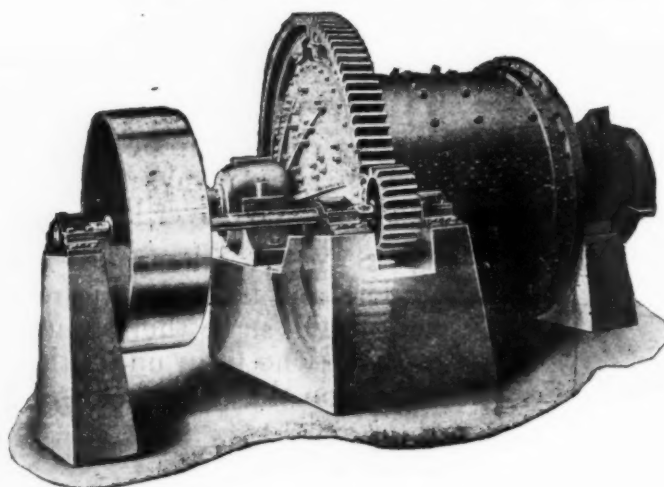
Send sample of material. We will send figures.

Trade **OK-BQ** Mark  
**PULVERIZER**

Illustrated catalog and references on request.

**K-B PULVERIZER CO., Inc.**  
86 Worth St., NEW YORK

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Are the simplest and most efficient pulverizing machines made.

They run at slow speed.

They're dustless.

They require no screens.

They require the minimum attention.

They consume the minimum amount of power per ton of rock crushed.

They will pulverize crusher rejections as readily as they will screenings.

They're made with capacities of from two tons per hour up.

The most extensively used machine for crushing to through 30" mesh by Cement Mills and Ore Reduction Plants is The Ball Mill.

**Traylor Engineering & Manufacturing Company**

Main Office and Works: Allentown, Pa.

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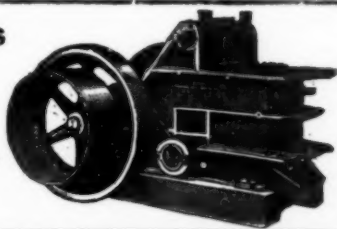
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Are fully described in our new CATALOG, which we send FREE

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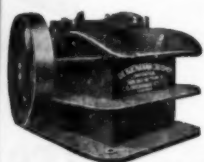


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For Mines, Stone Quarries and the Chemical Industry.

Crushing Plants complete in all details.

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Automatic Improved  
For All Materials.

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Established 1890 LOUISVILLE, KENTUCKY

Indirect Heat

## ROTARY DRYERS

Especially suitable for drying all kinds of GRANULAR MATERIAL

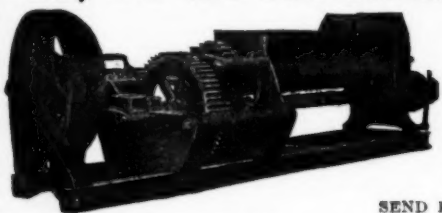
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THE FERNHOLTZ BRICK MACHINERY CO.  
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NEW ORLEANS, LA.

DOMESTIC

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Creosoted Cross-Arms, Lumber, Paving Blocks, Piles, Poles and Ties  
Private free wharf for ocean vessels Capacity 100 million feet board measure annually.  
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Creosoted Ties, Telegraph Poles, Cross-Arms, Timber, Piles and Paving Blocks  
Capacity 22,000,000 feet per annum.

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FOR ROCK PHOSPHATE AND LIMESTONE

Capacity, 10 to 200 tons per hour for Coarse and Medium Fine Product

Ore Washers, Jigs, Elevators, Conveyors, Etc.

LET US SEND CATALOG AND PRICES

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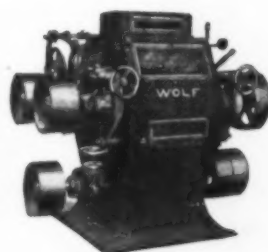
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The "Super Type" is nearly frictionless, sanitary, no oil spattering or water-logging, and is positively fireproof.

Let us demonstrate how it will reduce the power cost fully fifty per cent.

THE WOLF COMPANY  
Chambersburg, Pa.



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For Limestone in Cement, Lime and Agricultural plants; for Gypsum ahead of the Dryers; for Coal, either for coke oven, stoker, chain grates or industrial purposes; for Shale in brickyards; for Bones, either for case-hardening, glue or other purposes; for Shells for poultry feed and roofing purposes, and for many other materials which it is necessary to crush.

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Limestone Lime Gypsum Coal Ochres Dry Colors	Shale Clay Asphalt Sand All Clay Material	Tankage Bone Shells Poultry Feed and all Fertilizer Material	Oil Cake Linseed Cotton Seed Castor, Nitro Salt Cake Soy Bean Copra, Etc.

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SPECIAL  
Soap Powder Paper Stock and all Chemicals

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For all soft materials requiring reduction to a fine degree, such as Ochres, Colors, Soap Powder, Coal, Limestone, Lime, Gypsum, etc.

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For Wood Pulp, Rags, etc., in paper and pulp mills; Bark, Logwood, Dyewood, etc., in tanning, extract and dye plants; Alfalfa, Hay, Herbage and Cereals of all kinds; Licorice Root and all fibrous material.

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PLANT—ST. LOUIS, MO.

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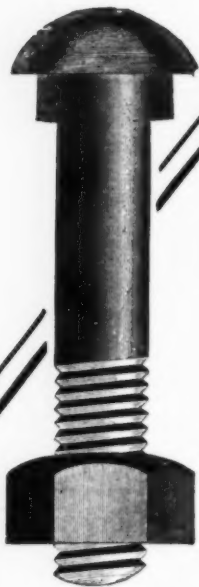
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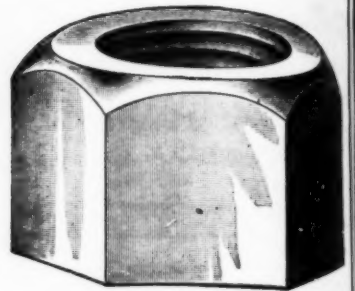
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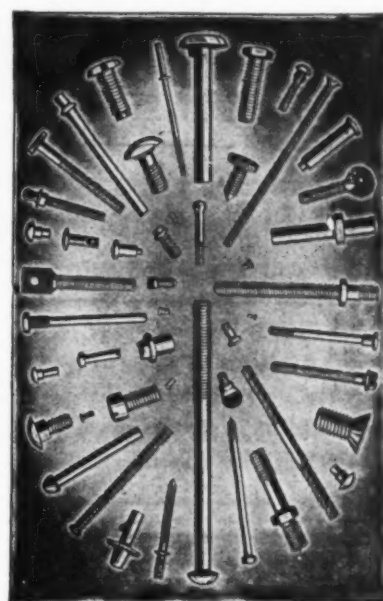
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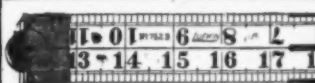
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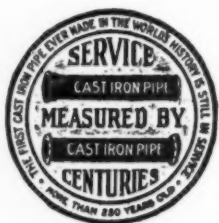


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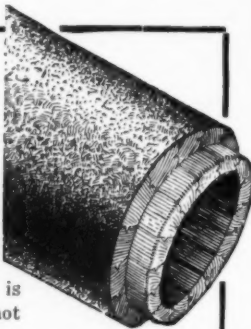
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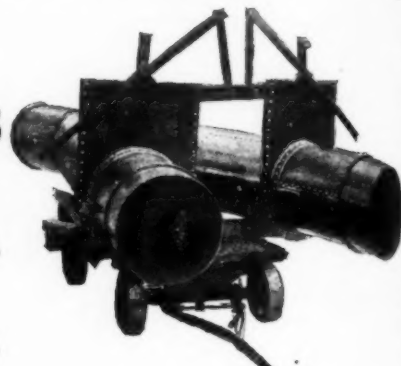
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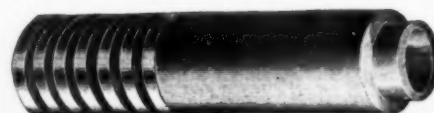
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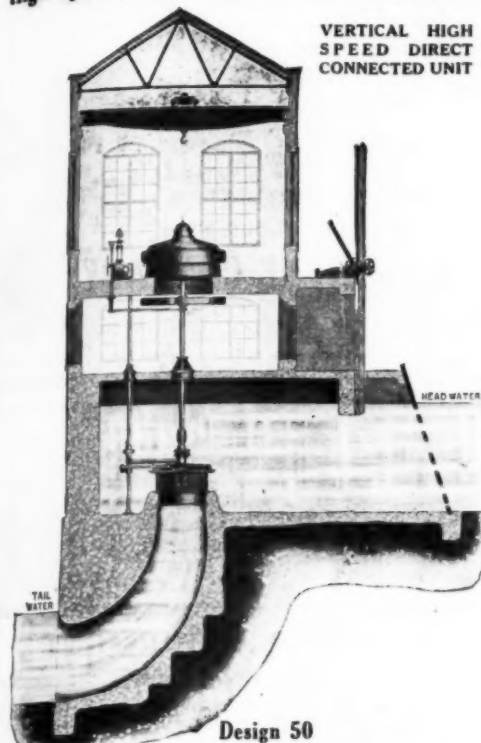
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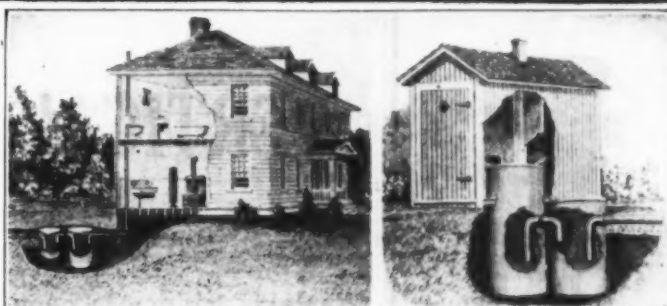
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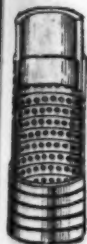
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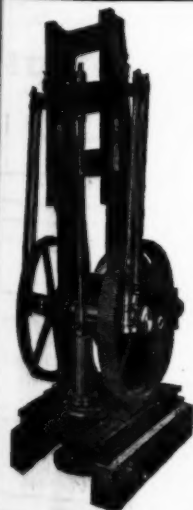
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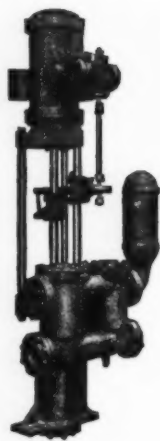
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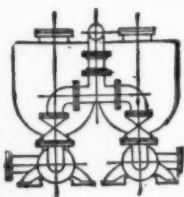
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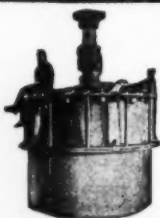
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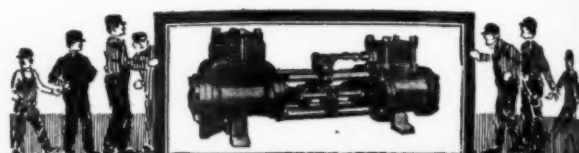


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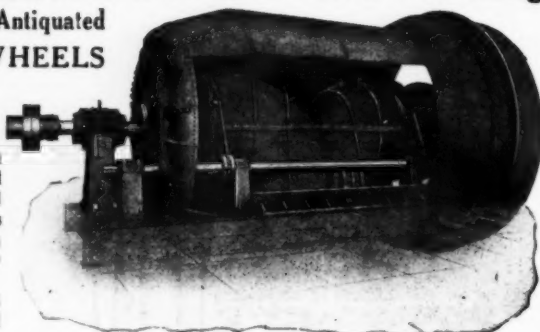
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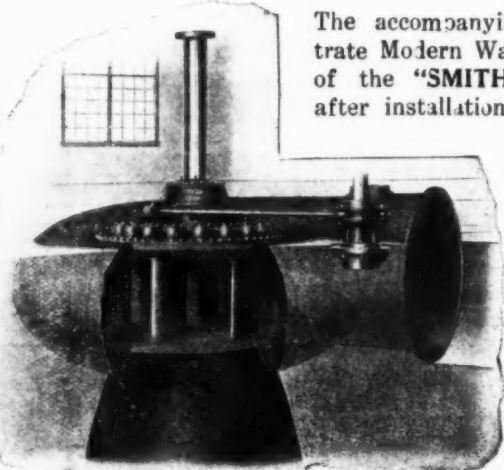
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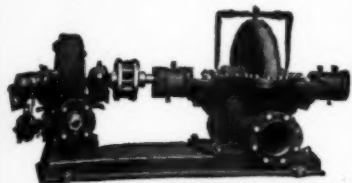
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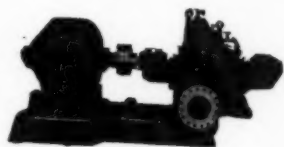
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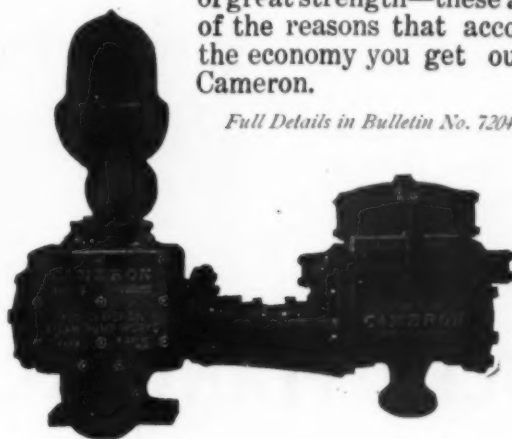
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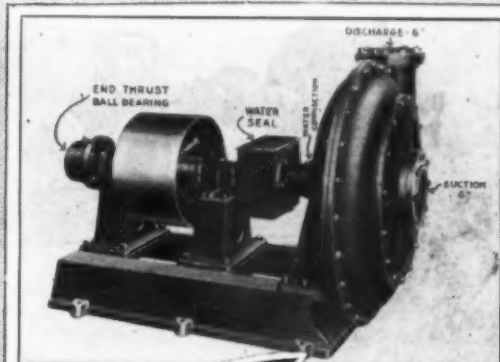


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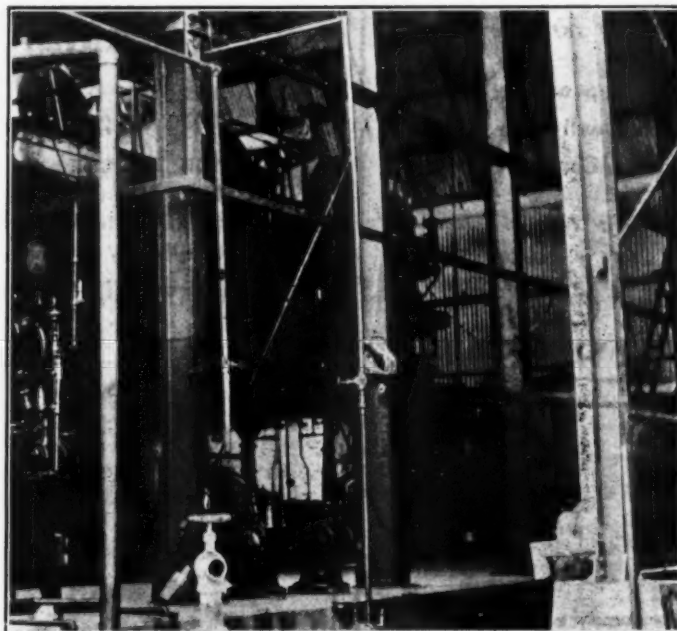
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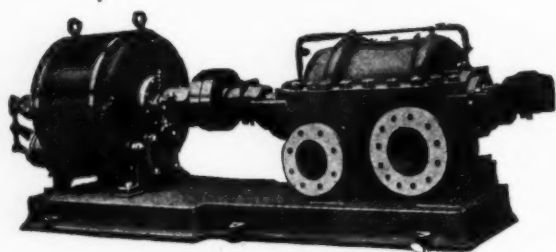
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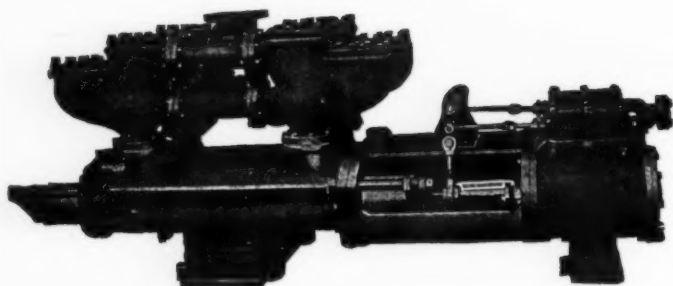


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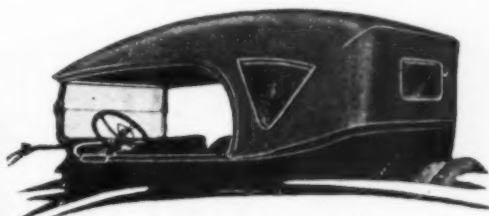
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To save time, labor and material, consider Fabrikoid—it is uniform in width and quality, 100% useable, and adapted to standardized methods of production



### Tell Us Your Leather Problem

The possibilities of Fabrikoid are unlimited. Varying grades for different uses. Our chemists and technical experts will help adapt Fabrikoid to your requirements. A word from you and they are at your service.

Tell us what you make and what you wish to accomplish. We will welcome your inquiry and will not hesitate to advise against Fabrikoid where it is not suitable. You will be under no obligation except to serve yourself. Write to-day.

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World's Largest Manufacturers of Leather Substitutes  
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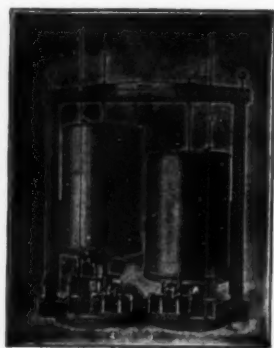
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for Cottonseed, Linseed, Mustard Seed, Rape Seed,  
Soya Bean, Castor Bean, Sesame and Copra.

Hydraulic Presses  
Chilled Crushing Rolls  
Automatic Cake Trimmers

Hydraulic Pumps

Hydraulic Accumulators  
Disc Hullers  
Cake Breakers

**Latest and Most Approved Types**  
Cotton Seed Cleaning, Hulling and Separating Machines

**CAKE FORMERS**—Automatic Steam,  
Hand Steam, Hydraulic and  
and Power.

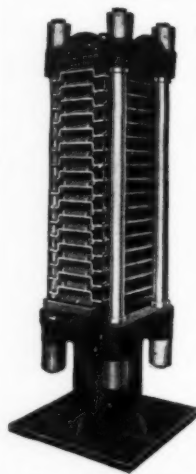
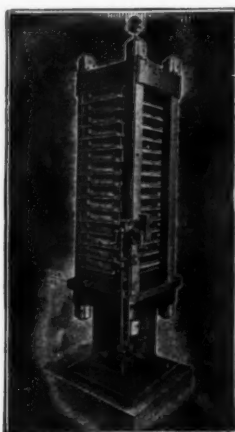
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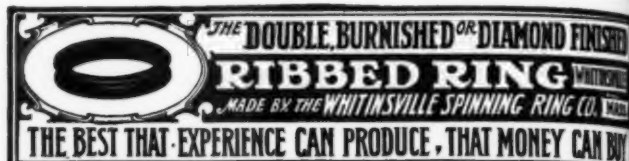
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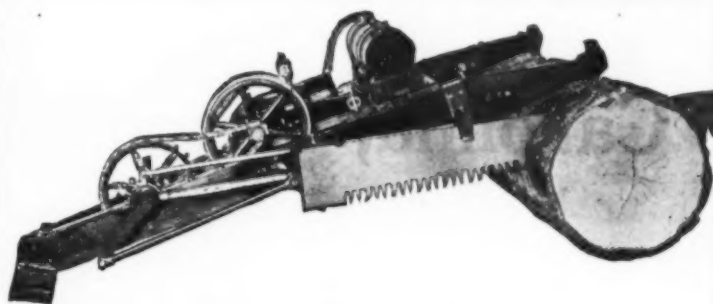
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Saves Labor

Increases Output

Is being used by Farmers,  
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Abundant supplies of coal, coke, iron, timber and other raw materials lie in the regions of Georgia and Alabama, which are traversed by the

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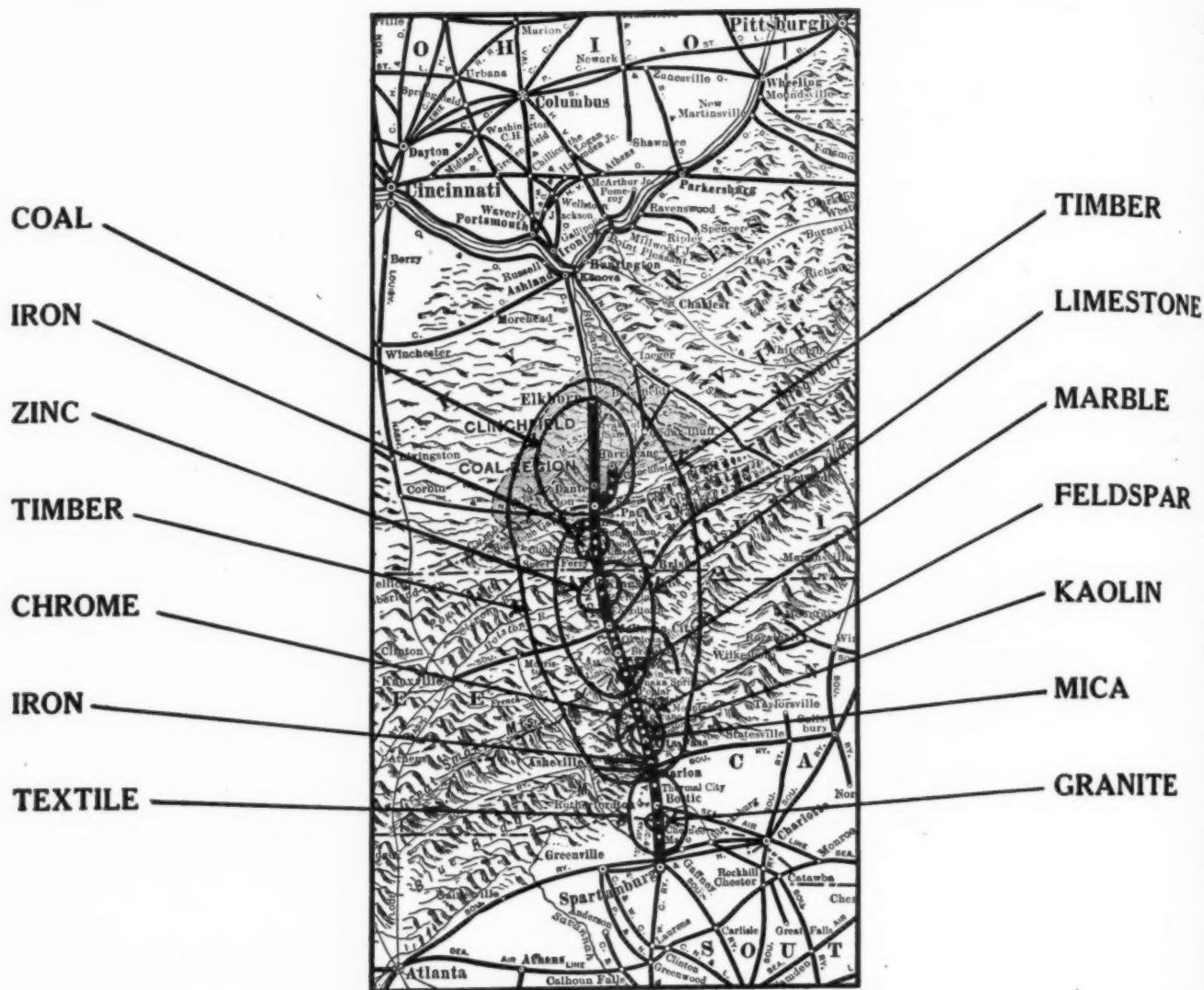
Many of the cities on the Central of Georgia Railway occupy advantageous positions for distributing warehouses, and a number of the larger northern and eastern manufacturers supply their southeastern trade from branch houses in these cities.

Full and detailed information upon application.

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An *ideal* location for an industry is *one* that has the *right* combination of raw materials, fuel, labor, climate and distribution facilities. This "right combination" is rarely, if ever, found in any one locality; but the Clinchfield territory offers several locations, any one of which approaches most nearly such an ideal.

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**Carolina, Clinchfield and Ohio Railway**  
JOHNSON CITY, TENNESSEE

# The Nation's Supply of Livestock Is Being Rapidly Diminished

An examination of livestock figures, comparing the resources of the country today with those of previous years, is startling.

The following table indicates that, with an increase of population in the United States, between 1900 and 1918, of nearly 40 per cent., the number of cattle, sheep and hogs shows a serious decline:

TOTAL NUMBER OF MEAT ANIMALS IN THE UNITED STATES.

	1918. Jan. 1 estimate.	1900 Census.
Milch cows. ....	23,284,000	17,135,633
Other cattle. ....	43,546,000	50,585,777
Sheep. ....	48,900,000	61,503,713
Swine. ....	71,374,000	62,868,041
Total meat animals. ....	187,104,000	192,093,164

The population of this country has increased from 75,000,000 in 1900 to 105,000,000 in 1918.

In considering the above and bearing in mind that it is necessary to send vast quantities of meat products abroad for our Allies, as well as for our fighters on the battlelines of Europe, the supreme need of bending every energy to add to our meat resources is readily seen.

This message cannot be delivered too strongly. It is absolutely vital to the life of the Nation. We are called upon to feed not only ourselves, but our Allies and our own fighting men.

In Florida there are great areas of idle land where livestock can be grazed twelve months in the year, and where, because of the ideal climate, no expensive housing is required. Florida presents an opportunity to the raiser of livestock which should not be overlooked.

We will be glad to supply information.

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Machinery Utilities Co., New York, N. Y.  
Waggon Engine Co., Lansing, Mich.  
Wolverine Engine Co., Chicago, Ill.  
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Weber & Co., Philadelphia, Pa.
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Waterloo Cement Mch. Corp., Waterloo, Iowa.
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Electric Bond & Share Co., New York, N. Y.  
Hornblower & Weeks, New York, N. Y.  
Leach & Co., A. B., New York, N. Y.  
Mercantile Trust & Deposit Co., Baltimore, Md.  
Nuven & Co., John, Chicago, Ill.  
Powell, Garard & Co., Chicago, Ill.  
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First National Bank, Birmingham, Ala.  
First National Bank, Richmond, Va.  
Maryland Trust Co., Baltimore, Md.  
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National Exchange Bk. of Balto., Baltimore, Md.  
Palmetto National Bank, Columbia, S. C.  
Union Trust Co., Chicago, Ill.
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Carnegie Steel Co., Pittsburgh, Pa.  
Lackawanna Steel Co., Lackawanna, N. Y.  
Schaper Const. Material Co., New York, N. Y.
- BARB.** (Ball Splice.)  
Ames & Co., W., Jersey City, N. J.
- BARB.** (Steel Rounds, Flats and Squares.)  
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Camden Forge Co., Camden, N. J.  
Concrete Steel Co., New York, N. Y.  
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Sweet's Steel Co., Williamsport, Pa.  
Tremball Steel Co., Warren, Ohio.
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General Fireproofing Co., Youngstown, Ohio.  
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 Meade & Co., Richard K., Baltimore, Md.  
 Nelson, Jr., Wm. P., New Orleans, La.  
 Pittsburgh Testing Laboratory, Pittsburgh, Pa.

##### CIVIL.

Arnold Co., The, Chicago, Ill.  
 Brackett, F. Ernest, Cumberland, Md.  
 Clark & Krebs, Charleston, W. Va.  
 Concrete-Steel Engr. Co., New York, N. Y.  
 Foundation Co., The, New York, N. Y.  
 Gardner & Howe, Memphis, Tenn.  
 Hall & Sons, B. M., Atlanta, Ga.  
 Kinneer & Co., W. S., New York, N. Y.  
 Knowles, Morris, Pittsburgh, Pa.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Pringle & Fairley, Blytheville, Ark.  
 White Companies, J. G., New York, N. Y.

##### DAMS.

Byllesby & Co., H. M., Chicago, Ill.  
 Cooper & Co., Hugh L., New York, N. Y.  
 Foundation Co., The, New York, N. Y.  
 Gardner & Howe, Memphis, Tenn.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Weller, Francis R., Washington, D. C.  
 White Companies, J. G., New York, N. Y.

##### DRAINAGE AND IRRIGATION.

Brett Eng. & Contracting Co., Norfolk, Va.  
 Ford, Bacon & Davis, New York, N. Y.  
 Knowles, Morris, Pittsburgh, Pa.  
 Pringle & Fairley, Blytheville, Ark.  
 Weller, Francis R., Washington, D. C.

##### EFFICIENCY.

Inst. of Industrial Research, Inc., Wash., D. C.  
 Little, Inc., Arthur D., Cambridge, Mass.  
 Meade & Co., W. E., Pittsburgh, Pa.  
 Nelson, Jr., Wm. P., New Orleans, La.

#### ELECTRICAL.

Arnold Co., The, Chicago, Ill.  
 Cooper & Co., Hugh L., New York, N. Y.  
 Friend & Weber, New Orleans, La.  
 Industrial Engineering Corp., Hazard, Ky.  
 Lide, Martin J., Birmingham, Ala.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Stone & Webster, Boston, Mass.  
 Stuart, James & Cooke, New York, N. Y.  
 Tucker & Laxton, Charlotte, N. C.  
 Westhouse, Church, Kerr & Co., New York, N. Y.  
 White, Gilbert C., Charlotte, N. C.  
 Wiley & Wilson, Lynchburg, Va.

#### ELECTRIC LIGHT AND POWER PLANTS.

Black & Veatch, Kansas City, Mo.  
 Byllesby & Co., H. M., Chicago, Ill.  
 Cooper & Co., Hugh L., New York, N. Y.  
 Ford, Bacon & Davis, New York, N. Y.  
 Foundation Co., The, New York, N. Y.  
 Graves Engr. Co., Inc., New York, N. Y.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Schofield Engr. Co., Philadelphia, Pa.  
 Stone & Webster, Boston, Mass.  
 Weller, Francis R., Washington, D. C.  
 Westhouse, Church, Kerr & Co., New York, N. Y.  
 White Companies, J. G., New York, N. Y.  
 White, Gilbert C., Charlotte, N. C.  
 Wiley & Wilson, Lynchburg, Va.

#### GAS.

Allison, Walter A., Philadelphia, Pa.  
 Byllesby & Co., H. M., Chicago, Ill.  
 Ford, Bacon & Davis, New York, N. Y.

#### GEOLOGICAL.

Clark & Krebs, Charleston, W. Va.  
 Davis, Geo. C., Philadelphia, Pa.  
 Froehling & Robertson, Richmond, Va.  
 Institute of Indust. Resch., Inc., Wash., D. C.  
 Mines Efficiency Co., Duluth, Minn.

#### HYDRO-ELECTRIC.

Byllesby & Co., H. M., Chicago, Ill.  
 Cooper & Co., Hugh L., New York, N. Y.  
 Foundation Co., The, New York, N. Y.  
 Kinneer & Co., W. S., New York, N. Y.  
 Knowles, Morris, Pittsburgh, Pa.  
 Main, Chas. T., Boston, Mass.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Schofield Engr. Co., Philadelphia, Pa.  
 Sirtine, J. E., Greenville, S. C.  
 Tucker & Laxton, Charlotte, N. C.  
 Weller, Francis R., Washington, D. C.  
 White Companies, J. G., New York, N. Y.  
 Wiley & Wilson, Lynchburg, Va.

#### INDUSTRIAL PLANT.

Austin Co., The, Cleveland, Ohio.  
 Brackett, F. Ernest, Cumberland, Md.  
 Brooks Engr. Co., C. L., Moultrie, Ga.  
 Concrete Steel Bridge Co., The, Clarkburg, W. Va.  
 Day & Zimmerman, Inc., Philadelphia, Pa.  
 Dixie Engineering & Insulating Co., Atlanta, Ga.  
 Foundation Co., The, New York, N. Y.  
 Friend & Weber, New Orleans, La.  
 Fuller Engineering Co., Allentown, Pa.  
 Gardner & Howe, Memphis, Tenn.  
 Institute of Indust. Resch., Inc., Wash., D. C.  
 International Conveyor Corp., The, Wash., D. C.  
 Kinneer & Co., W. S., New York, N. Y.  
 Little, Inc., Arthur D., Cambridge, Mass.  
 McKee & Co., Arthur G., Cleveland, Ohio.  
 Main, Chas. T., Boston, Mass.  
 Meade & Co., Richard K., Baltimore, Md.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Nelson, Jr., Wm. P., New Orleans, La.  
 O'Brien, W. C., Memphis, Tenn.  
 Rust Engineering Co., The, Pittsburgh, Pa.  
 Schofield Engr. Co., Philadelphia, Pa.  
 Stone & Webster, Boston, Mass.  
 Westhouse, Church, Kerr & Co., New York, N. Y.  
 White Companies, J. G., New York, N. Y.  
 Wiley & Wilson, Lynchburg, Va.  
 Wortham, Edwin, Richmond, Va.

#### INSPECTIONS AND TESTS.

Dow & Smith, New York, N. Y.  
 Fort Worth Laboratories, Fort Worth, Texas.  
 Froehling & Robertson, Richmond, Va.  
 Hunt & Co., Robert W., Chicago, Ill.  
 Institute of Indust. Resch., Inc., Wash., D. C.  
 Meade & Co., Richard K., Baltimore, Md.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Pittsburgh Testing Laboratory, Pittsburgh, Pa.  
 Pringle & Fairley, Blytheville, Ark.

#### LANDSCAPE.

Ruppard, Geo., Washington, D. C.  
 Hoffman, Leon, Atlanta, Ga.

#### LEVIES.

Brett Eng. & Contracting Co., Norfolk, Va.  
 Byllesby & Co., H. M., Chicago, Ill.  
 Ford, Bacon & Davis, New York, N. Y.  
 McCrary & Co., J. B., Atlanta, Ga.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Pringle & Fairley, Blytheville, Ark.  
 Wiley & Wilson, Lynchburg, Va.

#### METALLURGICAL.

Arnold Co., The, Chicago, Ill.  
 Dixie Engineering & Insulating Co., Atlanta, Ga.  
 Friend & Weber, New Orleans, La.  
 Fuller Engineering Co., Allentown, Pa.  
 Industrial Engineering Corp., Hazard, Ky.  
 Lide, Martin J., Birmingham, Ala.  
 Meade & Co., Richard K., Baltimore, Md.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Tucker & Laxton, Charlotte, N. C.  
 Wiley & Wilson, Lynchburg, Va.

#### METALLURGY.

Guernsey & Co., John B., Roanoke, Va.  
 Brackett, F. Ernest, Cumberland, Md.  
 Clark & Krebs, Charleston, W. Va.  
 Guernsey & Co., John B., Roanoke, Va.  
 Hall & Sons, B. M., Atlanta, Ga.  
 International Conveyor Corp., The, Wash., D. C.  
 Johnston, Jr., A. Langstaff, Richmond, Va.  
 Mines Efficiency Co., Duluth, Minn.

#### MUNICIPAL.

Clark & Krebs, Charleston, W. Va.  
 Dow & Smith, New York, N. Y.  
 Jennings-Lawrence Co., The, Columbus, O.  
 Knowles, Morris, Pittsburgh, Pa.  
 McCrary & Co., J. B., Atlanta, Ga.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 White, Gilbert C., Durham, N. C.

#### PACKING-HOUSES.

Brooks Engineering Co., C. L., Moultrie, Ga.  
 Dixie Engineering & Insulating Co., Atlanta, Ga.

#### PAVING AND ROADS.

Brett Eng. & Contracting Co., Norfolk, Va.  
 Dow & Smith, New York, N. Y.  
 Freeland-Klyce Engr. Co., Nashville, Tenn.  
 Institute of Indust. Resch., Inc., Wash., D. C.  
 Jennings-Lawrence Co., The, Columbus, O.  
 Pringle & Fairley, Blytheville, Ark.  
 White, Gilbert C., Durham, N. C.

#### PUBLIC SERVICE PROPERTIES.

Byllesby & Co., H. M., Chicago, Ill.  
 Cooper & Co., Hugh L., New York, N. Y.  
 Day & Zimmerman, Inc., Philadelphia, Pa.  
 Ford, Bacon & Davis, New York, N. Y.  
 Kinneer & Co., W. S., New York, N. Y.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 Schofield Engr. Co., Philadelphia, Pa.  
 Stone & Webster, Boston, Mass.  
 Weller, Francis R., Washington, D. C.  
 Westhouse, Church, Kerr & Co., New York, N. Y.  
 White Companies, J. G., New York, N. Y.  
 Wortham, Edwin, Richmond, Va.

#### RAILROAD.

Brackett, F. Ernest, Cumberland, Md.  
 Clark & Krebs, Charleston, W. Va.  
 Hunt & Co., Robert W., Chicago, Ill.  
 International Conveyor Corp., The, Wash., D. C.  
 Kinneer & Co., W. S., New York, N. Y.  
 Wortham, Edwin, Richmond, Va.

#### REFRIGERATING.

Brooks Engineering Co., C. L., Moultrie, Ga.  
 Dixie Engineering & Insulating Co., Atlanta, Ga.

#### REINFORCED CONCRETE.

(Bridges, Buildings, etc.)  
 Concrete-Steel Engr. Co., New York, N. Y.  
 Concrete Steel Bridge Co., The, Clarkburg, W. Va.  
 Foundation Co., The, New York, N. Y.  
 Freeland-Klyce Engr. Co., Nashville, Tenn.  
 Gardner & Howe, Memphis, Tenn.

Kinneer & Co., W. S., New York, N. Y.  
 Luten, Daniel B., Indianapolis, Ind.  
 Rust Engineering Co., The, Pittsburgh, Pa.  
 Savannah Eng. & Const. Co., Savannah, Ga.  
 Tucker & Laxton, Charlotte, N. C.  
 White Companies, J. G., New York, N. Y.

#### SEWERAGE AND WATER-WORKS.

Black & Veatch, Kansas City, Mo.  
 Brackett, F. Ernest, Cumberland, Md.  
 Ford, Bacon & Davis, New York, N. Y.  
 Jennings-Lawrence Co., The, Columbus, O.  
 Knowles, Morris, Pittsburgh, Pa.  
 Moore & Co., W. E., Pittsburgh, Pa.  
 White Companies, J. G., New York, N. Y.  
 White, Gilbert C., Durham, N. C.  
 Wiley & Wilson, Lynchburg, Va.

#### STEEL WORK AND ROLLING MILLS.

Smythe Co., The, S. R., Pittsburgh, Pa.

#### STRUCTURAL STEEL.

Freeland-Klyce Engr. Co., Nashville, Tenn.  
 Hedrick & Hedrick, Kansas City, Mo.  
 Shearer, C. E., Memphis, Tenn.

#### ENGINE. (Compressed Air.)

Dake Engine Co., Grand Haven, Mich.

#### GAS AND GASOLINE.

American-Blakeslee Mfg. Co., Birmingham, Ala.  
 Cooper Co., C. & G. M., Vernon, Ohio.  
 De La Vergne Machine Co., New York, N. Y.  
 Foss Gas Engine Co., Springfield, Ohio.  
 Machinery Utilities Co., New York, N. Y.  
 Metz Corp., August, New York, N. Y.  
 National Transit Pump & Mch. Co., Oil City, Pa.  
 Novo Engine Co., Lansing, Mich.  
 Witte Engine Works, Kansas City, Mo.

#### KEROSENE.

American-Blakeslee Mfg. Co., Birmingham, Ala.  
 Novo Engine Co., Lansing, Mich.  
 Witte Engine Works, Kansas City, Mo.

#### OIL.

Baltimore Oil Engine Co., Baltimore, Md.  
 Buckeye Machine Co., The, Lima, Ohio.  
 Chicago Pneumatic Tool Co., Chicago, Ill.  
 De La Vergne Machine Co., New York, N. Y.  
 Foss Gas Engine Co., Springfield, Ohio.  
 Machinery Utilities Co., New York, N. Y.  
 Metz Corp., August, New York, N. Y.  
 Muncie Oil Engine Co., Muncie, Ind.  
 National Transit Pump & Mch. Co., Oil City, Pa.  
 Power Mfg. Co., The, Marion, Ohio.  
 Worthington Pump & Mch. Corp., New York, N. Y.

#### STEAM.

Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
 Ames Iron Works, Oswego, N. Y.  
 Ball Engine Co., Erie, Pa.  
 Buffalo Forge Co., Buffalo, N. Y.  
 Clark Bros. Co., Plain, N. Y.  
 Cooper Co., C. & G. M., Vernon, Ohio.  
 Erie Pump & Engine Co., Medina, N. Y.  
 Harris Bros. Co., Chicago, Ill.  
 Hardie-Tynes Mfg. Co., Birmingham, Ala.  
 Houston, Stanwood & Gamble Co., Cincinnati, O.  
 Leff & Co., James, Springfield, Ohio.  
 Lombard Iron Works, Augusta, Ga.  
 Mecklenburg Iron Works, Charlotte, N. C.  
 Morris Machine Works, Baldwinville, N. Y.  
 Murray Iron Works Co., Burlington, Iowa.  
 Nagle Corlies & Co., New York, N. Y.  
 National Transit Pump & Mch. Co., Oil City, Pa.  
 Schofield Engr. Co., Macon, Ga.  
 Vilter Mfg. Co., Milwaukee, Wis.

#### UNIFLOW.

Ames Iron Works, Oswego, N. Y.

#### ENVELOPES.

Young & Selden Co., Baltimore, Md.  
 Birmingham Mch. & Fdry. Co., Birmingham, Ala.

#### EVAPORATORS. (Chemical.)

Birmingham Mch. & Fdry. Co., Birmingham, Ala.

#### EVAPORATING MACHINERY.

Louisville Drying Mch. Co., Louisville, Ky.

#### EXCAVATING MACHINERY.

American Clay Mch. Co., The, Bucyrus, Ohio.  
 Ball Engine Co., (Erie Steam Shovel Co.) Erie, Pa.  
 Bay City Dredge Works, Bay City, Mich.  
 Buckeye Traction Ditcher Co., Findlay, Ohio.  
 Byers Machine Co., The, John F., Ravenna, Ohio.  
 Fairbanks Steam Shovel Co., Marion, Ohio.  
 Hayward Co., The, New York, N. Y.  
 Keystone Driller Co., Beaver Falls, Pa.  
 Lidgerwood Mfg. Co., New York, N. Y.  
 Monaghan Machine Co., Chicago, Ill.  
 Morris Machine Works, Baldwinville, N. Y.  
 Osgood Co., The, Marion, Ohio.  
 Owen Bucket Co., The, Cleveland, Ohio.  
 Sauerman Bros., Chicago, Ill.

#### EXCAVATORS.

Carleway Dragline  
 Ball Engine Co., (Erie Steam Shovel Co.) Erie, Pa.  
 Sauerman Bros., Chicago, Ill.

#### TRENCH.

Ball Engine Co., (Erie Steam Shovel Co.) Erie, Pa.  
 Bay City Dredge Works, Bay City, Mich.  
 Buckeye Traction Ditcher Co., Findlay, Ohio.  
 Fairbanks Steam Shovel Co., Marion, Ohio.  
 Hayward Co., The, New York, N. Y.  
 Keystone Driller Co., Beaver Falls, Pa.  
 Lidgerwood Mfg. Co., New York, N. Y.  
 Monaghan Machine Co., Chicago, Ill.

#### EXHAUSTOR MACHINERY.

Kline, Lewis T., Alpena, Mich.

#### EXHAUST FANS. (Acid Proof.)

Durion Casting Co., Dayton, Ohio.

#### EXHAUST HEADS.

Abendroth & Root Mfg. Co., Newburgh, N. Y.  
 American Spiral Pipe Works, Chicago, Ill.

#### EXPANDED METAL LATH REINFORCING.

Consolidated Expanded Metal Co., Bradock, Pa.

#### EXPANSION JOINTS. (Street and Road.)

Northwestern Expanded Metal Co., Chicago, Ill.

#### EXPERT. (Agricultural.)

Morse, Stanley F., New Orleans, La.

#### EXPLOSIVES.

Acta Explosives Co., Inc., New York, N. Y.  
 Atlas Powder Co., Wilmington, Del.  
 Du Pont de Nemours & Co., E. I., Wilm'ton, Del.

#### EXPORTERS.

American Steel Export Co., New York, N. Y.  
 Burgess & Co., D. M., Petersburg, Va.

#### FACTORY SITES. (Town and Railroad.)

(See Industrial, Agricultural and Commercial Opportunities.)  
 Martien & Co., Wm., Baltimore, Md.

#### FEED-WATER HEATERS AND PURIFIERS.

American Water Softener Co., Philadelphia, Pa.  
 Murray Iron Works Co., Burlington, Iowa.  
 Worth-ton Pump & Mch. Corp., New York, N. Y.

#### FELT. (Building Sheathing.)

Barrett Co., New York, N. Y.

#### FELT PARTS. (Mechanical Purposes.)

Booth Felt Co., Inc., Brooklyn, N. Y.

#### FENCING.

Corrugated, Galvanized, Concrete.  
 Amer. Sheet & Tie Plate Co., Pittsburgh, Pa.

#### WOVEN WIRE FIELD.

American Steel & Wire Co., Chicago, Ill.  
 Anchor Post Iron Works, New York, N. Y.

#### Cyclone Fence Co., Waukegan, Ill.

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Joseph Iron Co., Isaac, Cincinnati, Ohio.  
Keystone Pipe & Supply Co., Butler, Pa.  
Klein & Sons, New York, N. Y.  
Lane Equipment Co., J., Springfield, Ohio.  
Lehman, Chas. T., Birmingham, Ala.  
Lodge & Shibley Machine Tool Co., Cincinnati, O.  
Lower Co., W. B., Chicago, Ill.  
McLaughlin & Co., A., Cincinnati, Ohio.  
MacPherson & Sons, Jacksonville, Fla.  
Machinery & Supply Co., Greensboro, N. C.  
Machinery Warehouse & Sales Co., Chicago, Ill.  
Malco Co., The, New York, N. Y.  
Malloy Machinery Corp., Baltimore, Md.  
Malsh & Sons, Chicago, Ill.  
Marine Metal & Supply Co., New York, N. Y.  
Marsh-Botke Mchry. Co., Chicago, Ill.  
Mayer, F., Chicago, Ill.  
Hartfelder-Garbutt Machinery Co., Savannah, Ga.  
McCrickerp Equipment Co., Syracuse, N. Y.  
Miller-Ober, Electric Co., Inc., Pittsburgh, Pa.  
Modern Mchry. Exchange, New York, N. Y.  
Moore Bros., Chicago, Ill.  
Mott's Sons, Geo. F., York, Pa.  
New York Machinery Exchange, New York, N. Y.  
Niles-Bement-Pond Co., J. P., Wayne, Ind.  
O'Brien Machinery Co., Philadelphia, Pa.  
Payne, Howard B., Pittsburgh, Pa.  
Payne, N. B., New York, N. Y.  
Peerless Iron Pipe Etc. Co., Inc., New York, N. Y.  
Petersen & Son, Inc., Philadelphia, Pa.  
Pfannmueler Engineering Co., Chicago, Ill.  
Phoenix Construction Co., New York, N. Y.  
Pipe & Contractors Supply Co., New York, N. Y.  
Pittsburgh Mchry. & Equip. Co., Pittsburgh, Pa.  
Potts & Co., Henry, Philadelphia, Pa.  
Power Equipment Co., Inc., Pittsburgh, Pa.  
Power Machinery Exchange, Jersey City, N. J.  
Prentiss & Co., Inc., Henry, New York, N. Y.  
Randle Machinery Co., Cincinnati, Ohio.  
Richmond Mill Supply Co., Richmond, Va.  
Ross & Sons Equipment Co., Indianapolis, Ind.  
Sachsenmayer, E. C., Gulf, New York, N. Y.  
Salzberg & Co., Harry E., New York, N. Y.  
Samlor Bros., Inc., Baltimore, Md.  
Scull-Jones & Co., Chicago, Ill.  
Seeger-Weirman Co., Atlanta, Ga.  
Service Equipment Co., Philadelphia, Pa.  
Seyfert's Sons, Inc., L. E., Philadelphia, Pa.  
Shaw, Willis, Chicago, Ill.  
Sonken-Galambia Iron & Metal Co., Kan. City, Mo.  
South Side Fdry. & Mch. Wks., Charleston, W. Va.  
Southern Metal Co., Metco Co., Jacksonville, Fla.  
Southern Machinery Co., Knoxville, Tenn.  
Southern States Equip. Co., New Orleans, La.  
Sterling Iron & Steel Co., Philadelphia, Pa.  
Stewart & J. (Electric), New Orleans, La.  
Stewart, Paul, Cincinnati, O.  
Stratler, Dan, New York, N. Y.  
Sydar, Bert L., Chattanooga, Tenn.  
Tampa Machinery Exchange, Tampa, Fla.  
Terwilliger Equipment Co., Philadelphia, Pa.  
Tilley Co., Inc., J. G., Bristol, Va.  
Tomney, Frank, Inc., Philadelphia, Pa.  
Torbert, C. C., New York, N. Y.  
Whayne Supply Co., Roy C., Louisville, Ky.  
Wilson Mchry. Co., St. Louis, Mo.  
Wood & Co., A. N., Inc., Philadelphia, Pa.  
Zelnicke Supply Co., Walter A., St. Louis, Mo.

**MACHINE TOOLS.**  
Houston, Stanwood & Gamble Co., The, Cinn., O.  
Niles-Bement-Pond Co., New York, N. Y.

**MAGNETIC SEPARATORS.**  
Buchanan Co., Inc., C. G., New York, N. Y.

**MAIL CHUTES.**  
Cutler Machine Co., Rochester, N. Y.

**MANGANERE.**  
Southern Minerals Corp., Boston, Mass.

**MANTELS.** (Period Designs in Composition).  
Mitchell, Vance Co., Inc., New York, N. Y.

**MECHANICAL DRAFT.**  
Buffalo Forge Co., Buffalo, N. Y.  
Clargre Fan Co., Kalamazoo, Mich.

**METALINE.**  
Metaline Co., Long Island City, N. Y.

**METAL CORNER BEAD.**  
Penn Metal Co., New York, N. Y.

**METAL CUTTING MACHINES.**  
Atkins & Co., Inc., E. C., Indianapolis, Ind.

**METAL.** (For Tanks, Culverts, Roofing, etc.).  
Trumbull Steel Co., Warren, Ohio.  
Whittaker-Glessner Co., Wheeling, W. Va.

**METAL-WORKING MACHINERY.**  
Bliss Co., E. W., Brooklyn, N. Y.  
Niles-Bement-Pond Co., New York, N. Y.

**MICROMETERS, CALIPERS, ETC.**  
Starrett Co., L. S., Athol, Mass.

**MILK FILTERS.** (Liquor, Milk, etc.)  
International Filter Co., Chicago, Ill.

**MILL MACHINERY AND SUPPLIES.**  
Bailey-Lebby Co., Inc., Charleston, S. C.  
Booth Felt Co., Brooklyn, N. Y.  
Empire Mchry. & Supply Corp., Norfolk, Va.  
Folts Mfg. & Supply Co., Hagerstown, Md.  
Lombard & Co., New York, N. Y.  
Mecklenburg Iron Works, Charlotte, N. C.  
New Bern Iron Works & Steel Co., Inc., New Bern, N. C.  
Starr Co., E. F., Baltimore, Md.  
Stevens & Briggs Co., Petersburg, Va.  
Wolf Co., Chambersburg, Pa.

**MILL SUPPLIES.**  
Kries & Sons Co., Henry A., Baltimore, Md.

**MILL TIMBER.**  
Great Southern Lumber Co., Bogalusa, La.  
Moss-Downer Lumber Co., Valdosta, Ga.

**MILL WORK.** (Lumber, All Kinds).  
Bacon & Sons, A. B., Savannah, Ga.

**MINE LAMPS.** (Electric).  
Edison Storage Battery Co., Orange, N. J.

**MINING MACHINERY.**  
Jeffrey Mfg. Co., Columbus, Ohio.  
Hess & Stone Mch. Co., Holidaysburg, Pa.  
McKlenburg Iron Works, Charlotte, N. C.  
The Automatic Shovel Co., Lorain, Ohio.

**MIXERS.** (Concrete).  
American Cement Mch. Co., Inc., Keokuk, Iowa.  
Eureka Machine Co., Lausning, Mich.  
Insey Manufacturing Co., Indianapolis, Ind.  
Jaeger Machine Co., Columbus, Ohio.  
Koeberling Machine Co., Milwaukee, Wis.  
Northwestern Steel & Iron Wks., Jan Clair, Wis.  
Ransome-Leach Co., Dunnellen, N. J.  
Standard Steel & Supply Co., Pittsburgh, Pa.  
Waterloo Cement Machinery Corp., Waterloo, Ia.

**MORTAR.**  
Koebing Machine Co., Milwaukee, Wis.

**MORTAR COLORES.**  
Chattanooga Paint Co., Chattanooga, Tenn.

**MOTOR TRUCKS.** (Gasoline).  
Garford Motor Truck Co., Lima, Ohio.  
General Motors Truck Co., Pontiac, Mich.  
International Motor Co., New York, N. Y.  
U. S. Motor Truck Co., The, Cincinnati, Ohio.

**MUSIC WIRE.**  
Aborn Steel Co., New York, N. Y.  
American Steel & Wire Co., Chicago, Ill.  
Waterbury Co., The, New York, N. Y.

**MAIL MACHINERY.** (Wire).  
Bleeper & Hartley, Inc., Worcester, Mass.

**NAILS.**  
CUT  
La Bell & Iron Works, Steubenville, Ohio.  
WINDS, ALL KINDS  
Atlantic Steel Co., Atlanta, Ga.  
Gulf States Steel Co., Birmingham, Ala.

**XUM**



## NAILS AND SPIKES.

Bethlehem Steel Co., South Bethlehem, Pa.  
La Belle Iron Works, Steubenville, Ohio.  
Republic Iron & Steel Co., Youngstown, Ohio.  
Stimpson Co., Edwin B., New York, N. Y.  
Youngstown Sheet & Tube Co., Youngstown, O.

## NAME PLATES. (For Highways.)

Union Iron Products Co., East Chicago, Ind.  
NICKEL. (Boron-Alloying.) [Shot].  
American Boron Products Co., Reading, Pa.

## NOZZLES. (Aerating Sprinkler, etc.)

Spray Engineering Co., Boston, Mass.

## OIL-BURNING EQUIPMENT.

Lockett & Co., Ltd., A. M., New Orleans, La.

## OIL CANS.

Wall Mfg. Supply Co., P., Allegheny, Pa.

## OIL MILL MACHINERY.

Burruss Engineering Co., Atlanta, Ga.

## OILS. (Lubricating, etc.)

Albany Lubricating Co., New York, N. Y.  
Borne, Stryumser Co., New York, N. Y.  
Gosden Co., Tulsa, Okla.  
Gulf Refining Co., Pittsburgh, Pa.  
Robinson & Son Co., Wm. C., Baltimore, Md.  
Standard Oil Co. of Louisiana, Baton Rouge, La.  
Swan & Finch Co., New York, N. Y.  
Texas Co., The, New York, N. Y.

## OIL WELL MACHINERY.

Cook, A. D., Lawrenceburg, Ind.  
Keystone Pipe & Supply Co., Butler, Pa.  
Lucy Mfg. Co., New York, N. Y.  
Williams Bros., Ithaca, N. Y.

## ORE BUYERS. (Copper, Lead, Gold, etc.)

Minerals Separation & Refining Co., Chicago, Ill.

## ORE WASHING MACHINERY.

Davis Foundry & Machine Works, Rome, Ga.  
McLennan Stone Mfg. Co., Holidaysburg, Pa.

## ORNAMENTAL IRON WORKS.

Bolles Iron & Wire Wks., J. E., Detroit, Mich.  
Chattanooga R. & F. Co., Chattanooga, Tenn.  
Dexter Metal Mfg. Co., Camden, N. J.  
Dow Wire & Iron Works, Inc., Louisville, Ky.  
Newman Mfg. Co., The, Cincinnati, Ohio.  
Page Steel & Wire Co., Adrian, Mich.  
Roanoke Iron & Bridge Wks., Inc., Roanoke, Va.  
Broad Architectural Iron Wks., Louisville, Ky.  
Stewart Iron Works Co., Cincinnati, Ohio.

## OXYGEN.

Linde Air Products Co., The, New York, N. Y.

## OXY-ACETYLENE WELDING AND CUTTING

Imperial Brass Mfg. Co., Chicago, Ill.

## PACKING HOUSE APPARATUS.

Dayton, Beater & Hoist Co., Dayton, Ohio.

## PACKING. (Asbestos, Metallic, Rubber, Leather, etc.)

Booth Felt Co., Inc., Brooklyn, N. Y.  
Cincinnati Rubber Mfg. Co., Cincinnati, Ohio.  
Dominion Asbestos & Rub. Corp., New York, N. Y.  
Goodrich Co., E. F., Akron, Ohio.  
Goodyear Tire & Rubber Co., Akron, Ohio.  
Graton & Knight Mfg. Co., Worcester, Mass.  
Johns-Manville Co., H. W., New York, N. Y.  
Power Specialty Co., New York, N. Y.

## PAINT.

METAL SURFACES.  
Dixon Crucible Co., Joseph, Jersey City, N. J.  
Du Pont de Nemours & Co., E. I., Wilm'ton, Del.  
Longman & Martin, New York, N. Y.  
Toch Bros., New York, N. Y.

## PRESERVATIVE.

Arco Co., Cleveland, Ohio.  
Du Pont de Nemours & Co., E. I., Wilm'ton, Del.  
Longman & Martin, New York, N. Y.  
Toch Bros., New York, N. Y.

## ROOFING, BUILDING, ETC.

Chattanooga Paint Co., Chattanooga, Tenn.  
Longman & Martin, New York, N. Y.  
Arco Co., Cleveland, Ohio.  
Longman & Martin, New York, N. Y.

## PARTITIONS. (Metal, Wooden, Rolling.)

David Lupton's Sons Co., Philadelphia, Pa.  
Detroit Steel Products Co., Detroit, Mich.

## PATENT ATTORNEYS.

Boyd, J. Hanson, Washington, D. C.  
Brown, Eugene C., Washington, D. C.  
Chandler & Chandler, Washington, D. C.  
Coleman, Watson E., Washington, D. C.  
Crane & Co., Victor J., Washington, D. C.  
Shepherd & Campbell, Washington, D. C.  
Whitaker, Norman T., Washington, D. C.

## PAVING BLOCK.

Granite Paving Block Mfrs. Assn., Boston, Mass.

## PAVING BLOCKS. (Wood.)

Crescent Materials Co., Inc., New Orleans, La.  
Republic Creosoting Co., Indianapolis, Ind.  
Southern Creosoting Co., Ltd., Slidell, La.  
Southern Paving Const. Co., Chattanooga, Tenn.  
Southern Wood Preserving Co., Atlanta, Ga.

## PAVING BRICK.

Standard Brick Co., Macon, Ga.

## PAVING GUARDS. (Steel.)

International Steel Tie Co., The, Cleveland, Ohio.

## PAVING MIXERS. (Concrete.)

American Cement Mch. Co., Inc., Keokuk, Iowa.  
Jaeger Machine Co., The, Columbus, Ohio.  
Ransome-Leach Co., Dunellen, N. J.  
Standard Scale & Supply Co., Pittsburgh, Pa.  
Waterloo Cement & Mch. Corp., Waterloo, Ia.

## PAVING PLANTS. (Asphalt.)

Cumner & Son Co., F. D., Cleveland, Ohio.  
Warren Bros. Co., Boston, Mass.

## PERFORATED METAL.

Caldwell & Son Co., H. W., Chicago, Ill.  
Wedge Perforating Co., Rochester, N. Y.  
Harrington & King Perforating Co., Chicago, Ill.  
Heardrick Mfg. Co., The, Carbondale, Pa.  
Manhattan Perforated Metal Co., New York, N. Y.  
Maud & Sons, Charles, Jersey City, N. J.

## PETROLEUM REFINERS.

Cosden & Co., Tulsa, Okla.  
Gulf Refining Co., Pittsburgh, Pa.  
Standard Oil Co. of Louisiana, Baton Rouge, La.  
Texas Co., The, New York, N. Y.

## PHOSPHATE MACHINERY.

American Process Co., New York, N. Y.  
Bally-Lebby Co., The, Charleston, S. C.  
C-B Pulverizer Co., New York, N. Y.  
McLennan Stone Mch. Co., Holidaysburg, Pa.  
Walk & Murdoch Co., Charleston, S. C.

## PIG IRON.

Alabama Co., The, Birmingham, Ala.  
Bethlehem Steel Co., South Bethlehem, Pa.  
Bourne-Fuller Co., The, Cleveland, Ohio.  
Brier Hill Steel Co., Youngstown, Ohio.  
Hammond-Bryd Co., The, Birmingham, Ala.  
La Belle Iron Works, Steubenville, Ohio.  
Republic Iron & Steel Co., Youngstown, Ohio.  
Tennessee Coal, Iron & R. M. Co., Birmingham, Ala.

## PILING. (Creosoted.)

American Creosote Works, New Orleans, La.  
Creosoted Material Co., Inc., New Orleans, La.  
Southern Creosoting Co., Ltd., Slidell, La.  
Southern Paving Const. Co., Chattanooga, Tenn.

## PILLOW BLOCKS.

Caldwell & Son Co., H. W., Louisville, Ky.  
Goldens Foundry & Machine Co., Columbus, Ga.  
Medart Patent Pulley Co., St. Louis, Mo.

## SHAFT.

Bond Fdy. & Mch. Co., Manheim, Pa.

## PIPE. (Southern Long Leaf.)

Great Southern Lumber Co., Bogalusa, La.

## PIPE.

La Belle Iron Works, Steubenville, Ohio.  
National Tube Co., Pittsburgh, Pa.  
Youngstown Sheet & Tube Co., Youngstown, O.

## PIPE.

CAST IRON.  
American Cast Iron Pipe Co., Birmingham, Ala.  
Cast Iron Pipe Publicity Bureau, New York, N. Y.  
Central Foundry Co., New York, N. Y.  
Charlotte Pipe & Foundry Co., Charlotte, N. C.  
Glamorgan Pipe & Foundry Co., Lynchburg, Va.  
National Cast Iron Pipe Co., Birmingham, Ala.  
U. S. Cast Iron Pipe & Fdry. Co., Burlington, N. J.  
Wood & Co., R. D., Philadelphia, Pa.

## PIPE.

FRICK CO., Waynesboro, Pa.  
RYNTER.  
Abendroth & Root Mfg. Co., Newburgh, N. Y.  
New Bern I. Wks. & S. Co., Inc., New Bern, N. C.

## PIPE.

SECOND HAND.  
Cassell & Co., B., Chattanooga, Tenn.  
Griffith, James F., Philadelphia, Pa.  
Keystone Pipe & Supply Co., Butler, Pa.  
Marine Metal & Supply Co., New York, N. Y.  
Ohio Pipe Co., Findlay, Ohio.  
Peerless Iron Pipe Exc., Inc., New York, N. Y.  
Pipe & Contractors' Supply Co., New York, N. Y.

## PIPE.

STEEL.  
Abendroth & Root Mfg. Co., Newburgh, N. Y.  
American Spiral Pipe Works, Chicago, Ill.

## PIPE.

STEEL.  
Standard Spiral Pipe Works, Chicago, Ill.

## PIPE.

STEEL.  
National Tube Co., Pittsburgh, Pa.  
La Belle Iron Works, Steubenville, Ohio.  
Republic Iron & Steel Co., Youngstown, Ohio.  
Youngstown Sheet & Tube Co., Youngstown, O.

## PIPE.

WOOD.  
Michigan Pipe Co., Bay City, Mich.  
Pacific Tank & Pipe Co., San Francisco, Cal.  
Rie W. Co., The, Cleveland, Ohio.  
Standard Wood Pipe Co., Williamsport, Pa.  
Wyckoff & Son Co., A., Elmira, N. Y.

## PIPE.

WROUGHT IRON.  
Youngstown Sheet & Tube Co., Youngstown, O.

## PIPE.

PIPES & FITTINGS. (Acid Proof.)  
Duriron Casting Co., Dayton, Ohio.

## PIPE.

PIPE BENDERS.  
American Pipe Bending Mch. Co., Boston, Mass.

## PIPE.

PIPE COVERINGS.  
Magnesia Association of America, Phila., Pa.

## PIPE.

PIPE FITTINGS.  
American Cast Iron Pipe Co., Birmingham, Ala.  
Crane Co., Chicago, Ill.  
Griffith, James F., Philadelphia, Pa.  
Kries & Sons Co., Henry A., Baltimore, Md.  
Lunkenheimer Co., The, Cincinnati, Ohio.  
National Cast Iron Pipe Co., Birmingham, Ala.

## PIPE.

PIPE UNIONS AND JOINTS.  
Dart Mfg. Co., M., Providence, R. I.

## PIPE.

PISTON RINGS. (Compressors, Engines, etc.)  
The Evertight Piston Ring Co., St. Louis, Mo.

## PIPE.

PITCH.  
Barrett Co., New York, N. Y.

## PIPE.

PLATES.  
Allegheny Steel Co., Pittsburgh, Pa.  
Cincinnati Iron & Steel Co., Cincinnati, Ohio.  
Midvale Steel & Ordnance Co., Philadelphia, Pa.  
Wood Iron & Steel Co., Allentown, Pa.

## PIPE.

PLAYGROUND APPARATUS.  
Safety First Supply Co., Pittsburgh, Pa.

## PIPE.

POLES. (Chestnut, Electric Light, Telephone.)  
Davison & McBrady, Nashville, Tenn.

## PIPE.

POLES. (Creosoted.)  
American Creosote Works, New Orleans, La.  
Creosoted Material Co., Inc., New Orleans, La.  
Southern Creosoting Co., Ltd., Slidell, La.  
Southern Exchange Co., New York, N. Y.  
Southern Pav. Const. Co., Chattanooga, Tenn.  
Southern Wood Preserving Co., Atlanta, Ga.

## PIPE.

POLISHING MACHINERY. (Wheels, Blocks.)  
Vitrolite Wheel Co., Westfield, Mass.

## PIPE.

POSTS. (Cast Iron.) [Railway and Highway].  
U. S. Cast Iron Pipe & Fdry. Co., Burlington, N. J.

## PIPE.

POST CAPS.  
Van Dorn Iron Works Co., The, Cleveland, O.

## PIPE.

POWER TRANSMISSION MACHINERY.  
Alvey-Ferguson Co., Inc., Cincinnati, Ohio.  
Bally-Lebby Co., Charleston, S. C.  
Bond Fdy. & Mch. Co., Manheim, Pa.  
Caldwell & Son Co., H. W., Chicago, Ill.  
Caldwell & Son Co., W. E., Louisville, Ky.  
Conway & Co., Cincinnati, Ohio.  
Crescon-Morris Co., Philadelphia, Pa.  
Dodge Sales & Engr. Co., Mishawaka, Ind.  
Goldens Foundry & Machine Co., Columbus, Ga.  
Jeffrey Mfg. Co., Columbus, Ohio.  
Jones & Laughlin Steel Co., Pittsburgh, Pa.  
Link-Belt Co., Philadelphia, Pa.  
Medart Patent Pulley Co., St. Louis, Mo.  
Morris Chain Co., Ithaca, N. Y.  
Schofield Iron Works, Macon, Ga.  
Smith-Courtney Co., Richmond, Va.  
Standard Pressed Steel Co., Philadelphia, Pa.  
Wolf Co., The, Chambersburg, Pa.  
Wood's Sons, T. B., Chambersburg, Pa.

## PIPE.

PRESERVATIVE. (Canvas.)  
Robeson Preserve Products Co., Port Huron, Mich.

## PIPE.

PRESSES.  
Baling, Cottonseed Oil, Etc., Hydraulic and Power.  
Anderson Co., The, V. D., Cleveland, Ohio.  
Bauer Bros., The, Springfield, Ohio.  
Dunning & Boschert Press Co., Inc., Syracuse, N. Y.  
Cardwell Machine Co., Richmond, Va.  
Continental Gin Co., Birmingham, Ala.  
French Oil Mill Mch. Co., The, Piqua, Ohio.  
Huttenlocher Co., The, Cincinnati, Ohio.  
Ripley Foundry & Machine Co., Ripley, Ohio.  
Saco-Lowell Shops, Boston, Mass.

## PIPE.

METAL STAMPING.  
Stimpson Co., Edwin B., Brooklyn, N. Y.

## PIPE.

STAMPING.  
Ama Machine Co., Max, Bridgeport, Conn.  
Biles Co., E. W., Brooklyn, N. Y.

## PIPE.

PRINTERS. (Book, Catalog, Job, etc.)  
Robert & Son, Birmingham, Ala.  
Fleet-McGinley Co., Baltimore, Md.

## PIPE.

PRISON WORK.  
Van Dorn Iron Works, The, Cleveland, Ohio.

## PIPE.

PULLEYS.  
FRICTION CLUTCH.  
Caldwell & Son Co., H. W., Chicago, Ill.  
Caldwell & Son Co., W. E., Louisville, Ky.  
Crescon-Morris Co., Philadelphia, Pa.  
Dodge Sales & Engr. Co., Mishawaka, Ind.  
Medart Patent Pulley Co., St. Louis, Mo.  
Wood's Sons Co., T. B., Chambersburg, Pa.

## PIPE.

SPRING IRON.  
Medart Patent Pulley Co., St. Louis, Mo.

## PIPE.

WOOD SPLIT.  
Caldwell & Son Co., H. W., Chicago, Ill.  
Medart Patent Pulley Co., St. Louis, Mo.

## PULVERIZERS.

American Pulverizer Co., St. Louis, Mo.  
Austin Mfg. Co., Chicago, Ill.  
Excelsior Tool & Mch. Co., East St. Louis, Mo.  
Fuller-Lehigh Co., Fullerton, Pa.  
Grundler Pat. Crusher & Pulv. Co., St. Louis, Mo.  
Jeffrey Mfg. Co., Columbus, Ohio.  
K-B Pulverizer Co., Inc., New York, N. Y.  
McLennan-Stone Mch. Co., Holidaysburg, Pa.  
Raymond Bros. Impact, Pulv. Co., Chicago, Ill.  
Traylor Engineering & Mfg. Co., Allentown, Pa.  
Western Wheel Scraper Co., Aurora, Ill.  
Williams Pat. Crusher & Pulv. Co., Chicago, Ill.

## PULVERIZERS.

PUMPING MACHINERY.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Cook, A. D., Lawrenceburg, Ind.  
Dayton-Dick Co., Quincy, Ill.  
Dean Bros. Steam Pump Wks., Indianapolis, Ind.  
Emerson Pump & Valve Co., Alexandria, Va.  
Goulds Mfg. Co., Seneca Falls, N. Y.  
Hart-Courtenay Co., Newark, N. J.  
Lucy Mfg. Co., New York, N. Y.  
Moffatt Machy. Mfg. Co., Charlotte, N. C.  
Morris Machine Works, Baldwinville, N. Y.  
Mutual Foundry & Machine Co., Atlanta, Ga.  
Myers & Bro., F. E., Ashland, Ohio.  
National Transit Pump & Mch. Co., Oil City, Pa.  
Reilly Mfg. Co., J. J., Louisville, Ky.  
Vogt Bros. Mfg. Co., Louisville, Ky.  
Wood & Co., R. D., Philadelphia, Pa.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

PUMPS.  
ACID PROOF.  
Duriron Casting Co., Dayton, Ohio.

## PULVERIZERS.

AIR LIFT.  
Ingersoll-Rand Co., New York, N. Y.  
Sullivan Mch. Co., Chicago, Ill.

## PULVERIZERS.

ASPHALT AND ROAD OIL.  
Kinney Mfg. Co., Boston, Mass.

## PULVERIZERS.

BOILER FEED.  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Dayton-Dick Co., Quincy, Ill.  
Dean Bros. Steam Pump Wks., Indianapolis, Ind.  
Goulds Mfg. Co., Seneca Falls, N. Y.  
Lucy Mfg. Co., New York, N. Y.  
Moffatt Machy. Mfg. Co., Charlotte, N. C.  
Murray Iron Works Co., Burlington, Iowa.  
Myers & Bro., F. E., Ashland, Ohio.  
Reilly Mfg. Co., J. J., Louisville, Ky.  
Vogt Bros. Mfg. Co., Louisville, Ky.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

CENTRIFUGAL.  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
Buffalo Steam Pump Wks., Buffalo, N. Y.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Dayton-Dick Co., Quincy, Ill.  
Erie Pump & Engine Co., Medina, N. Y.  
Goulds Mfg. Co., Seneca Falls, N. Y.  
Hart-Courtenay Co., Newark, N. J.  
Lucy Mfg. Co., New York, N. Y.  
Murray Machine Works, Baldwinville, N. Y.  
Mutual Foundry & Machine Co., Atlanta, Ga.  
Novo Engine Co., Lansing, Mich.  
Wood & Co., R. D., Philadelphia, Pa.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

DEEP WELL.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Cook, A. D., Lawrenceburg, Ind.  
Goulds Mfg. Co., Seneca Falls, N. Y.  
Hurt-Dennison Mfg. Co., Kansas City, Mo.  
Layne & Bowler Co., Memphis, Tenn.  
Novo Engine Co., Lansing, Mich.

## PULVERIZERS.

DIAPHRAGM.  
Novo Engine Co., Lansing, Mich.

## PULVERIZERS.

DREDGING.  
Buffalo Steam Pump Works, Buffalo, N. Y.  
Erie Pump & Engine Co., Medina, N. Y.  
Morris Machine Works, Baldwinville, N. Y.  
Mutual Foundry & Machine Co., Atlanta, Ga.  
Wood & Co., R. D., Philadelphia, Pa.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

FUEL-OIL.  
Lockett & Co., Ltd., A. M., New Orleans, La.

## PULVERIZERS.

HYDRAULIC.  
Dunning & Boschert Press Co., Inc., Syracuse, N. Y.  
Buffalo Steam Pump Wks., Buffalo, N. Y.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Cardwell Machine Co., Richmond, Va.  
Dean Bros. Steam Pump Wks., Indianapolis, Ind.  
French Oil Mill Machinery Co., The, Piqua, O.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

OR.  
Lockett & Co., Ltd., A. M., New Orleans, La.

## PULVERIZERS.

POWER.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

STEAM.  
Buffalo Steam Pump Co., Buffalo, N. Y.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Cook, A. D., Lawrenceburg, Ind.  
Dean Bros. Steam Pump Wks., Indianapolis, Ind.  
Emerson Pump & Valve Co., Alexandria, Va.  
Lucy Mfg. Co., New York, N. Y.  
Murray Iron Works Co., Burlington, Iowa.  
National Transit Pump & Mch. Co., Oil City, Pa.  
Reilly Mfg. Co., J. J., Louisville, Ky.  
Vogt Bros. Mfg. Co., Louisville, Ky.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

TRIPLEX POWER.  
Novo Engine Co., Lansing, Mich.

## PULVERIZERS.

VACUUM.  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
Cameron Steam Pump Wks., A. S., New York, N. Y.  
Dean Bros. Steam Pump Wks., Indianapolis, Ind.  
Nagle Corlies Engine Works, Erie, Pa.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

DAYTON-DICK CO., Quincy, Ill.  
Goulds Mfg. Co., Seneca Falls, N. Y.  
Hurt-Dennison Mfg. Co., Kansas City, Mo.  
Worthington Pump & Mch. Corp., New York, N. Y.

## PULVERIZERS.

PUMP LEATHERS.  
Graton & Knight Mfg. Co., Worcester, Mass.

## PULVERIZERS.

PUNCHING AND SHEARING MACHINERY.  
Biles Co., E. W., Brooklyn, N. Y.

## PULVERIZERS.

RAILING (Iron Pipe).  
Pipe Railing Const. Co., Long Island, City, N. Y.

## PULVERIZERS.

RAILROADS. (Offering Industrial, Agricultural and Commercial Opportunities.)  
Carolina, Clinch. & O. R. R., Johnson City, Tenn.  
Central of Georgia Railway, Savannah, Ga.  
Georgia & Florida Rwy., Augusta, Ga.  
Model Land Company of the Flagler System, St. Augustine, Fla.  
Winston-Salem Southbound Railway Co., Winston-Salem, N. C.

## PULVERIZERS.

RAILROAD EQUIPMENT AND SUPPLIES.  
(New and Second-hand.)  
American Frog & Switch Co., Hamilton, Ohio.  
American Metallic Packing Co., Lexington, Ky.  
American Rwy. Equipment Co., Pittsburgh, Pa.  
Atlantic Equipment Co., The, New York, N. Y.  
Bally-Lebby Co., Charleston, S. C.  
Bender Iron & Supply Co., S. Shreveport, La.  
Birmingham Rail & Loco. Co., Birmingham, Ala.  
Carey Co., Thos. F., New York, N. Y.  
Cincinnati Frog & Switch Co., Cincinnati, O.  
Dobbs Co., New York, N. Y.  
Fisher & Marks, Cleveland, Ohio.  
Foster Co., L. B., Pittsburgh, Pa.  
Georgia Car & Locomotive Co., Atlanta, Ga.  
Givins Co., Herbert, New York, N. Y.  
Granville Co., Joseph D., St. Louis, Mo.  
Harris Bros. Co., Chicago, Ill.  
Hoffman & Co., Inc., R. C., Baltimore, Md.  
Houston Railway Car Co., Houston, Tex.  
Hyde & Company, Pittsburgh, Pa.  
Joseph Iron Co., The, Isaac, Cincinnati, Ohio.  
Kilby Frog & Switch Co., Birmingham, Ala.  
Kleinbans Co., H., Pittsburgh, Pa.  
Light Railway Equipment Co., Philadelphia, Pa.  
Machinery & Supply Co., Greensboro, N. C.



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Memphis Steel Const. Co. of Pa., Pittsburgh, Pa.  
 Adelaide Steel & Ordnance Co., Philadelphia, Pa.  
 Phoenix Iron Co., Philadelphia, Pa.  
 Pittsburgh-Birmingham Steel Co., Pittsburgh, Pa.  
 Pittsburg & Wabash Steel Co., Pittsburg, Pa.  
 Republic Iron & Steel Co., Youngstown, Ohio.  
 Richmond Structural Steel Co., Richmond, Va.  
 Roanoke Iron & Bridge Works, Roanoke, Va.  
 Broad Architectural Iron Works, Louisville, Ky.  
 Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.  
 Vincennes Bridge Co., Vincennes, Ind.  
 Virginia Bridge & Iron Co., Roanoke, Va.  
 Walsh & Weldner Boiler Co., Chattanooga, Tenn.  
**SULPHUR.**  
 Freeport Sulphur Co., Freeport, Texas.  
**SULPHURIC ACID.**  
 Davison Chemical Co., Baltimore, Md.  
 De Pont de Nemours & Co., E. I., Wilim'ton, Del.  
**SUPER-HEATERS.** (Steam.)  
 Babcock & Wilcox Co., New York, N. Y.  
 Power Specialty Co., New York, N. Y.  
**SURVEYING INSTRUMENTS.**  
 Weber & Co., F., Philadelphia, Pa.  
**SWINGING ENGINES.**  
 Dake Engine Co., Grand Haven, Mich.  
**SWITCHBOARDS, SWITCHES, ETC.**  
 General Electric Co., Schenectady, N. Y.  
 West-house Elec. & Mfg. Co., East Pittsburgh, Pa.  
**SWITCHSTANDS.**  
 Bethlehem Steel Co., South Bethlehem, Pa.  
 Weir Frog Co., Cincinnati, Ohio.  
**TACKLE BLOCKS.** (For Wire or Manila Rope.)  
 Broderick & Bancom Rope Co., St. Louis, Mo.  
 Topping Block, New York, N. Y.  
**TALC PRODUCTS.**  
 De Soto Talc Co., Chattanooga, Ga.  
 Harford Talc Co., Inc., The, Baltimore, Md.  
**TANKS.**  
 CORRUGATED METAL K. D.  
 Tennessee Metal Culvert Co., Nashville, Tenn.  
**LEAD LINED.**  
 Hauser-Stander Tank Co., The, Cincinnati, O.  
 Iron and Steel.  
 American Bridge Co., New York, N. Y.  
 American Water Cooler Co., Philadelphia, Pa.  
 Caldwell Co., Inc., W. L., Louisville, Ky.  
 Casey-Hedges Co., Chattanooga, Tenn.  
 Chattanooga Boiler and Tank Co., Chattanooga, Tenn.  
 Des Moines Bridge & Iron Co., Des Moines, Ia.  
 Des Moines Bridge & Iron Co., Des Moines, Ia.  
 Hartley Boiler Works, Montgomery, Ala.  
 Hendricks Mfg. Co., Carbondale, Pa.  
 Lombard Iron Works, Augusta, Ga.  
 Lookout Boiler & Mfg. Co., Chattanooga, Tenn.  
 Macouck Boiler Co., Co. of Pa., Pittsburgh, Pa.  
 Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.  
 Scaife & Sons Co., Wm. B., Pittsburgh, Pa.  
 Schofield Iron Works, Macon, Ga.  
 Southern Boiler & Tank Works, Memphis, Tenn.  
 Standard Tank Co., New York, N. Y.  
 Struthers-Wells Co., Warren, Pa.  
 Tennessee Metal Culvert Co., Nashville, Tenn.  
 Virginia Bridge & Iron Co., Roanoke, Va.  
 Walsh & Weldner Boiler Co., Chattanooga, Tenn.  
 West-house Traction Brake Co., Wilmerding, Pa.  
**STANDARD TANK CO.,** New York, N. Y.  
**PACKING-HOUSE.**  
 Dayton Beater & Hoist Co., Dayton, Ohio.  
**PICKLING.**  
 Hauser-Stander Tank Co., The, Cincinnati, O.  
**PIPE.**  
 Caldwell Co., Inc., W. L., Louisville, Ky.  
 Davis & Son, G. M., Palatka, Fla.  
 Hauser-Stander Tank Co., Cincinnati, Ohio.  
 Pacific Tank & Pipe Co., San Francisco, Cal.  
**TAPES.** (Measuring.)  
 Lufkin Rule Co., Saginaw, Mich.  
 Starrett Co., L. S., Athol, Mass.  
**TELEPHONES.** (Supplies, Equipment.)  
 Sedgwick Telephone Co., of Pa., Pittsburgh, Pa.  
 Western Electric Co., New York, N. Y.  
**TELEPHONE SERVICE.**  
 American Telephone & Telegraph Co.  
**TERRA-COTTA.** (Ornamental.)  
 Atlanta Terra-Cotta Co., Atlanta, Ga.  
**TREADING AND TAPPING MACHINERY.**  
 Webster & Perks Tool Co., The, Springfield, O.  
**THREASHERS.**  
 Cardwell Machine Co., Richmond, Va.  
**TIERING MACHINES.** (Portable.)  
 Economy Engineering Co., Chicago, Ill.  
**TILE.**  
**DRAIN.**  
 Northwestern Steel & Iron Wks., East Claire, Wis.  
 O'Connor Brick & Tile Co., Milledgeville, Ga.  
**FLOOR, WALL, MARBLE, ETC.**  
 Amer. Enam. Brick & Tile Co., New York, N. Y.  
 Hood Brick Co., B. Midlin, Atlanta, Ga.  
 National Mosaic Tile Co., Inc., Mobile, Ala.  
**STRUCTURAL.**  
 O'Connor Brick & Tile Co., Milledgeville, Ga.  
**TILE SLABS.**  
 Ludowici-Celadon Co., Chicago, Ill.  
**TIMBERS.** (Creosoted.)  
 American Creosote Works, New Orleans, La.  
 Republic Creosoting Co., Indianapolis, Ind.  
**TIME RECORDERS.**  
 Eco Clock Co., Boston, Mass.  
 Hardinge Bros., Inc., Chicago, Ill.  
 Newsum Clock Co., New York, N. Y.  
**TIN AND TERNE PLATES.**  
 American Sheet & Tin Plate Co., Pittsburgh, Pa.  
 Liberty Steel Co., Warren, Ohio.  
 Trumbull Steel Co., Warren, Ohio.  
**TOBACCO MACHINERY.**  
 Buckeye Iron & Brass Works, Dayton, Ohio.  
 Cardwell Machine Co., Richmond, Va.  
 Ripley Foundry & Machine Co., Ripley, Ohio.  
**TOOLS.**  
**MACHINISTS.**  
 Western Tool & Mfg. Co., Springfield, Ohio.  
**MECHANICAL.**  
 Starrett Co., L. S., Athol, Mass.  
**PNEUMATIC.**  
 Chicago Pneumatic Tool Co., Chicago, Ill.  
 Independence Pneumatic Tool Co., Chicago, Ill.  
 Ingersoll-Rand Co., New York, N. Y.  
**TOOLHOLDERS.**  
 Western Tool & Mfg. Co., Springfield, Ohio.  
**TORCHES.**  
 Wall Mfg. Supply Co., F., Allegheny, Pa.  
**TOWERS.**  
**ELECTRIC TRANSMISSION.**  
 American Bridge Co., New York, N. Y.  
**STEEL AND WOOD.**  
 Caldwell Co., Inc., W. L., Louisville, Ky.  
 Chattanooga Boiler & Tank Co., Chattanooga, Tenn.  
 Chesapeake Iron Works, Baltimore, Md.  
 Des Moines Bridge & Iron Co., Des Moines, Ia.  
 Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.  
 Walsh & Weldner Boiler Co., Chattanooga, Tenn.  
**TRAMWAY.**  
**OVERHEAD.**  
 Spedell, J. G., Reading, Pa.  
 Yale & Towne Mfg. Co., New York, N. Y.  
**WIRE ROPE.**  
 American Steel & Wire Co., Chicago, Ill.  
 Broderick & Bancom Rope Co., St. Louis, Mo.  
 Caldwell & Son Co., H. W., Chicago, Ill.  
 Waterbury Co., New York, N. Y.  
**TRANSFORMERS.**  
 General Electric Co., Schenectady, N. Y.  
 West-house Elec. & Mfg. Co., East Pittsburgh, Pa.  
**TRANSMISSION BEARINGS AND HANGERS.**  
 Hyatt Roller Bearing Co., New York, N. Y.

XUM



**TRENCHING MACHINERY**  
Ball Engine Co. (Erie Steam Shovel Co.) Erie, Pa.  
Buckeye Traction Ditcher Co., Findlay, Ohio.  
Thew Automatic Shovel Co., Lorain, Ohio.

**TRUCKS.**

**DAY KILN.**  
Moore Dry Kiln Co., L., Jacksonville, Fla.  
**MOTOR.** (Gasoline.)  
Garford Motor Truck Co., Lima, Ohio.  
General Motors Truck Co., Pontiac, Mich.  
International Motor Co., New York, N. Y.

**PLATFORM, FREIGHT, MILL, FACTORY, ETC.**  
Chase Foundry & Mfg. Co., Columbus, Ohio.  
Edwards Mfg. Co., Cincinnati, Ohio.

**TRUCK TIRES.**

Goodyear Tire & Rubber Co., Akron, Ohio.

**TUBES.** (Roller.)

Allegheny Steel Co., Pittsburgh, Pa.  
Cincinnati Iron & Steel Co., Cincinnati, Ohio.  
Midvale Steel & Ordnance Co., Philadelphia, Pa.  
National Tube Co., Pittsburgh, Pa.

**TUBE WELL STRAINERS.**

Cook, A. D., Lawrenceburg, Ind.

**TUBING.** (Rubber.)

Cincinnati Rubber & Mfg. Co., Cincinnati, Ohio.  
Goodyear Tire & Rubber Co., Akron, Ohio.

**WAGON.**

Griffith, James F., Philadelphia, Pa.  
La Belle Iron Works, Steubenville, Ohio.  
Ward's Sons Co., Edgar T., Philadelphia, Pa.

**TURBINES.**

**HYDRAULIC.**  
Davis Foundry & Machine Works, Rome, Ga.  
Leffel & Co., James, Springfield, Ohio.  
Smith Co., S. Morgan, York, Pa.  
Trump Mfg. Co., The, Springfield, Ohio.

**STEAM.**

Alle-Chalmers Mfg. Co., Milwaukee, Wis.  
General Electric Co., Schenectady, N. Y.  
Westhouse Elec. & Mfg. Co., East Pittsburgh, Pa.

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Broderick & Ransom Rope Co., St. Louis, Mo.  
Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N. Y.

**TURNTABLES.**

American Bridge Co., New York, N. Y.  
Virginia Bridge & Iron Co., Roanoke, Va.

**TWINE.**

Columbia Rope Co., Auburn, N. Y.

**UNIONS.**

Dart Mfg. Co., E. M., Providence, R. I.  
**UPHOLSTERING MATERIAL.** (For Autos & Furniture.)  
Du Pont Fabrikoid Co., Wilmington, Del.

**VACUUM PANS.**

Birmingham Mch. & Fdry. Co., Birmingham, Ala.

**VALVES.**

Bourbon Copper & Brass Wks. Co., Cincinnati, O.  
Cincinnati Rubber & Mfg. Co., Cincinnati, Ohio.  
Columbian Iron Works, Chattanooga, Tenn.  
Crane Co., Chicago, Ill.  
Frick Co., Waynesboro, Pa.  
Glasgow Pipe & Fdry. Co., Lynchburg, Va.  
Goodyear Tire & Rubber Co., Akron, Ohio.  
Lunkenheimer Co., The, Cincinnati, Ohio.  
Midland Brass Works, The, Ft. Worth, Texas.

Vogt Mch. Co., Inc., Henry, Louisville, Ky.  
Westhouse Traction Brake Co., Wilmerding, Pa.

**VALVES.**

**ACID PROOF.**  
Dariron Casting Co., Dayton, Ohio.  
Lunkenheimer Co., Cincinnati, Ohio.

**DEEP WELL.**

Midland Brass Works, The, Ft. Worth, Texas.  
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Morgan Construction Co., Worcester, Mass.

**VALVE OPERATORS.** (Sprocket Rim.)  
Babbitt Steam Specialty Co., New Bedford, Mass.

**VARNISH.**

Arco Co., Cleveland, Ohio.  
**VAULT DOORS.**  
National Safe Co., Cleveland, Ohio.

**VENEER CUTTING MACHINERY.**  
American-Blakeslee Mfg. Co., Birmingham, Ala.  
Titus, E. E., Petersburg, Va.

**VENTILATING APPARATUS.** (Engineers' and Contractors.)  
Buffalo Forge Co., Buffalo, N. Y.  
Carrier Engineering Corp., New York, N. Y.  
Clargie Fan Co., Kalamazoo, Mich.  
Skinner Bros. Mfg. Co., St. Louis, Mo.

**VENTILATORS.** (Roof.)

Edwards Mfg. Co., Cincinnati, Ohio.  
Merchant & Evans Co., Philadelphia, Pa.

**VISES.**

Hollands Manufacturing Co., Erie, Pa.  
Western Tool & Mfg. Co., Springfield, Ohio.

**WAGONS.** (Dump.)

Everett Mfg. Co., Newark, New York.  
Western Wheeled Scraper Co., Aurora, Ill.

**WAGON LOADERS.**

Bonney Supply Co., Inc., Rochester, N. Y.  
Halsey Mfg. Co., Geo., New York, N. Y.  
Jeffrey Mfg. Co., Columbus, Ohio.  
Link-Belt Co., Philadelphia, Pa.

**PORTABLE MACHINERY CO., INC., Passaic, N. J.**  
**WALL BOARD.** (Walls, Ceilings, etc.)  
Cornell Wood Products Co., Chicago, Ill.

**WALL PLUGS.** (Galvanized.)  
Niagara Falls Metal Stamping Works, Niagara Falls, N. Y.

**WALL TIES.**  
Niagara Falls Metal Stamping Works, Niagara Falls, N. Y.

**WASHING MACHINERY.**

**ONE AND PHOSPHATE.**  
Bailley-Lebby Co., Charleston, S. C.

**SAND AND GRAVEL.**  
Bonney Supply Co., Inc., Rochester, N. Y.  
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Link-Belt Co., Philadelphia, Pa.

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Stimpson Co., Edwin B., Brooklyn, N. Y.  
Topping Bros., New York, N. Y.

**GRAPHITE AND BRONZE OIL-LESS.**  
Bound Brook Oil-less Brng. Co., Bound Brook, N. J.

**WASHERS AND GASKETS.** (Felt.)  
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Robeson Preservo Products Co., Port Haron, Mich.

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Sonneborn Sons, Inc., L., New York, N. Y.  
Toch Bros., New York, N. Y.

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Electric Ozone Sterilizer Co., Chicago, Ill.  
Seale & Sons Co., Wm. B., Pittsburgh, Pa.

**WATER-SOFTENING APPARATUS.** (Purifying.)  
American Water Softener Co., Philadelphia, Pa.  
Dodge Sales & Engineering Co., Mishawaka, Ind.  
International Filter Co., Chicago, Ill.  
Pittsburgh Filter Mfg. Co., Pittsburgh, Pa.  
Richmond Water Softening Co., Richmond, Ind.  
Tucker & Laxton, Charlotte, N. C.

**WATER STERILIZATION.**  
Electric Ozone Sterilizer Co., Chicago, Ill.

**WATERWORKS SUPPLIES, APPLIANCES.**  
American Cast Iron Pipe Co., Birmingham, Ala.  
Bourbon Copper & Brass Wks. Co., Cincinnati, O.  
Cast Iron Pipe Publicity Bureau, New York, N. Y.  
Coldwell-Wilcox Co., Newburgh, N. Y.  
Columbian Iron Works, Chattanooga, Tenn.  
Glasgow Pipe & Fdry. Co., Lynchburg, Va.  
Layne & Bowler Co., Memphis, Tenn.  
Michigan Pipe Co., Bay City, Mich.  
Standard Spiral Pipe Works, Chicago, Ill.  
U. S. Cast Iron Pipe & Fdry. Co., Burlington, N. J.  
Wood & Co., R. D., Philadelphia, Pa.

**WATCHMAN'S PORTABLE CLOCKS.**  
Eco Clock Co., Boston, Mass.  
Harding Bros., Inc., Chicago, Ill.  
Newman Clock Co., New York, N. Y.

**WELDING APPARATUS.** (Electric.)  
Lincoln Electric Co., Cleveland, Ohio.

**WELDING APPARATUS.** (Oxy-Acetylene Process.)  
Imperial Brass Mfg. Co., Chicago, Ill.

**WELDING SUPPLIES.** (Oxy-Acetylene.)  
Imperial Brass Mfg. Co., Chicago, Ill.  
Linde Air Products Co., New York, N. Y.

**WELL CONTRACTORS.** (Oil, Artesian, etc.)  
Cook, A. D., Lawrenceburg, Ind.  
Hughes Specialty Well Drill Co., Charleston, S. C.  
Layne & Bowler Co., Memphis, Tenn.

**WELL TOOLS AND SUPPLIES.**  
Cook, A. D., Lawrenceburg, Ind.  
Johnson, Inc., Edward E., St. Paul, Minn.  
Williams Bros., Itasca, N. Y.

**WHEELS AND AXLES.**  
Electric Wheel Co., Quincy, Ill.  
Oliver Mfg. Co., W. J., Knoxville, Tenn.

**WINDOW FRAMES AND SASH.** (Fireproof.)  
Detroit Steel Products Co., Detroit, Mich.  
Lupton Sons Co., David, Philadelphia, Pa.  
Truscon Steel Co., Youngstown, Ohio.

**WINDOW GUARDS.**  
Iron and Steel.  
Dexter Metal Mfg. Co., Camden, N. J.

**IRON AND WIRE.**  
Cincinnati Iron Fence Co., Cincinnati, Ohio.  
Standard Iron & Wire Wks., Chattanooga, Tenn.

**WINDOW SASH.** (Steel.)  
Detroit Steel Products Co., Detroit, Mich.

**WIRE.**  
**BARBED WIRE, ETC.**  
American Steel & Wire Co., Chicago, Ill.  
Atlantic Steel Co., Atlanta, Ga.  
Gulf States Steel Co., Birmingham, Ala.  
Page Steel & Wire Co., Adrian, Mich.  
Youngstown Sheet & Tube Co., Youngstown, Pa.

**FENCE.**  
Cyclone Fence Co., Waukegan, Ill.  
Flat and Round.  
Roehling's Sons Co., John A., Trenton, N. J.

**GALVANIZED AND ASBESTOS.**  
Aborn Steel Co., New York, N. Y.  
American Steel & Wire Co., Chicago, Ill.  
Page Steel & Wire Co., Adrian, Mich.

**INSULATED.**  
Electric Cable Co., New York, N. Y.

**TELEPHONE, TELEGRAPH.**  
American Steel & Wire Co., Chicago, Ill.

**WIRE CLOTH.** (Iron, Steel, Brass, etc.)  
Caldwell & Son Co., H. W., Chicago, Ill.  
Ludlow-Saylor Wire Co., St. Louis, Mo.  
Meyers Mfg. Co., The, Fred. J., Hamilton, Pa.  
New Jersey Wire Cloth Co., Trenton, N. J.  
Wright Wire Co., The, Worcester, Mass.

**WIRE COILING MACHINERY.**  
Sleeper & Hartley, Inc., Worcester, Mass.

**WIRE GOODS.**  
Bales Iron & Wire Works, J. E., Detroit, Mich.  
Cincinnati Iron Fence Co., Cincinnati, Ohio.  
Cyclone Fence Co., Waukegan, Ill.  
Dow Wire & Iron Works, Inc., Louisville, Ky.  
Dufur & Co., Baltimore, Md.

**WIRE NETTING.**  
Ludlow-Saylor Wire Co., St. Louis, Mo.  
New Jersey Wire Cloth Co., Trenton, N. J.

**WIRE RODS.**  
Gulf States Steel Co., Birmingham, Ala.

**WIRE ROPE CLIPS.**  
American Steel & Wire Co., Chicago, Ill.  
Broderick & Ransom Rope Co., St. Louis, Mo.

**WIRE STRAIGHTENING AND CUTTING MACHINERY.**  
Sleeper & Hartley, Inc., Worcester, Mass.

**WOOD DISTILLATION EQUIPMENT.**  
Struthers-Wells Co., Warren, Pa.

**WOOD PIPE.** (For Water, etc.)  
Michigan Pipe Co., Bay City, Mich.  
Standard Wood Pipe Co., Williamsport, Pa.

**WOOD PRESERVATIVE.**  
Wright & Son Co., A., Elmira, N. Y.

**WOODWORKING MACHINERY.**  
Kline, Lewis T., Alpena, Mich.

**WRENCH MANUFACTURERS.**  
Lakeside Forge Co., Erie, Pa.

**YARN.** (Tatted Sisk.)  
Columbian Rope Co., Auburn, N. Y.

**ZINC.**  
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Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 348..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 349..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 350..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 351..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 352..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 353..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 354..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 355..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 356..... 89		Corr, R. L..... 90	
Amer. Chain Co., Inc..... *	Baldwin Locomotive Works..... 105	Box 357..... 89		Corr, R. L..... 90	
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See Pages  
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## Here is *Real* Truck Performance

Every now and then an interesting instance of truck performance comes to our attention that indicates the worth of U. S. Trucks.

Shown above is a U. S. truck in the service of the Pekin Hardwood Lumber Company hauling a big "six tonner" to the saw mill six miles away.

The first part of the haul was through plowed fields and then steep, sandy Indiana roads. Once, on the highway, the truck went through a culvert, letting the rear wheels down to the axle. But it pulled out on its own power.

Almost every day the Pekin Company call on their U. S. for the most grueling service—and it has never failed them. U. S. trucks have extra strength to meet just such emergencies.

Performance like this in the open country means even better service in the city, where the roads are better and the service less severe.

The Floating Power Plant of the U. S. very unusual ability stand up under hard, rough work. It gets maximum results from power plant at all times and low maintenance costs.

Before you buy a truck, investigate the Floating Power Plant. Send for booklet, "Why the Floating Power Plant?"



THE FLOATING POWER PLANT

U. S. Motors are mounted at four points on a sub-frame and this sub-frame is mounted at three points on the main frame.

This is the most flexible of all methods of mounting a truck motor

### The United States Motor Truck Company CINCINNATI

WORM DRIVE  $2\frac{1}{2}$ ,  $3\frac{1}{2}$  AND 5 TONS.  
CHAIN DRIVE  $2\frac{1}{2}$  AND  $3\frac{1}{2}$  TONS.

# U.S. MOTOR TRUCKS

[August 22]



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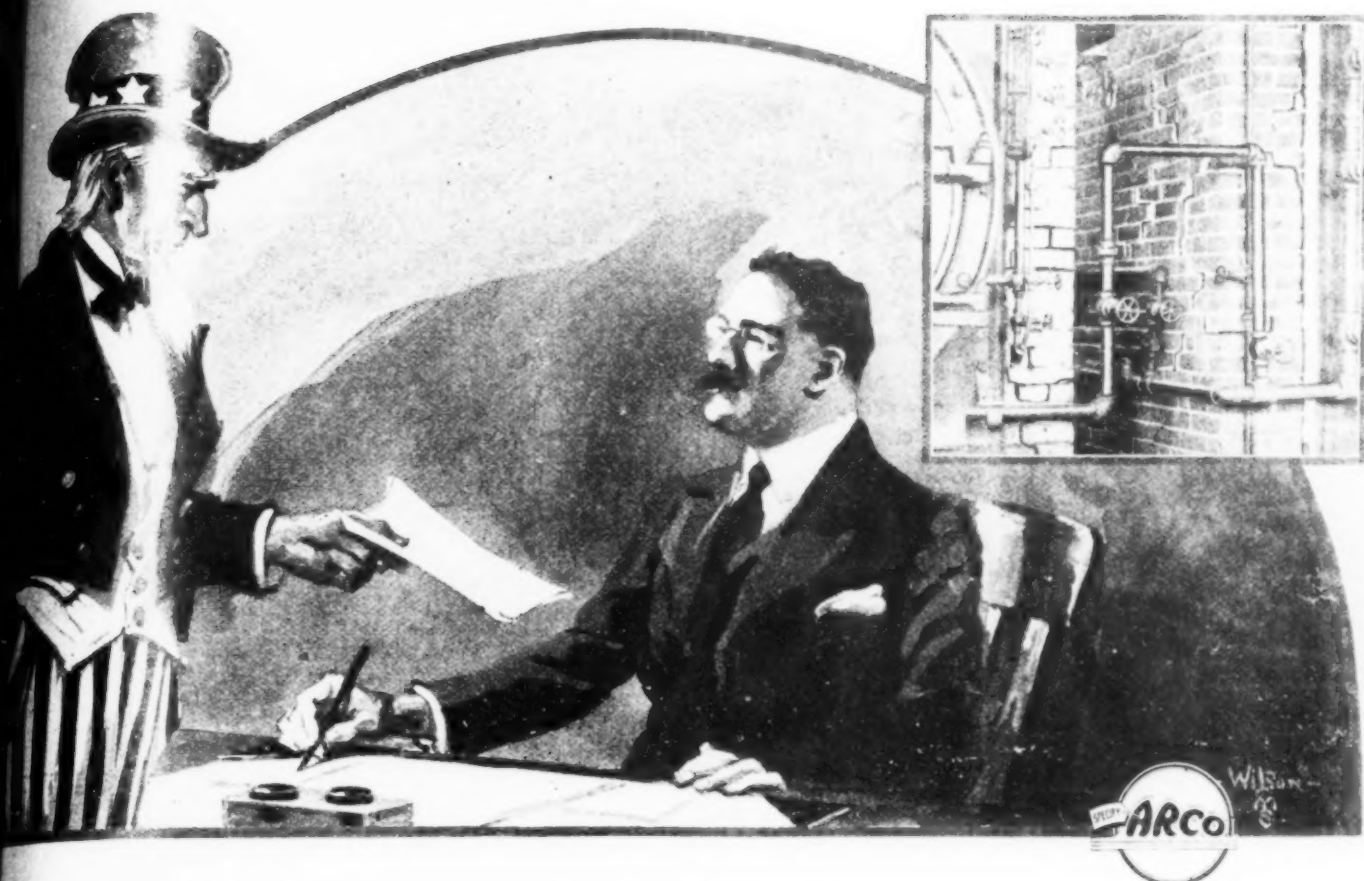
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# How Does the Government Power Plant Questionnaire Affect You?"

EXTRACTS FROM THE RECENTLY ISSUED QUESTIONNAIRE.

"Question 2. Check air leaks observed, as follows:

- Leaks in boiler setting.....
- Openings between boiler and setting.....
- Badly warped fire-doors.....
- Badly warped cleaning or access doors.....
- Leaks around blow-off piping.....

## RECOMMENDATIONS BY THE FUEL ADMINISTRATION.

"That the grates be in good repair, that settings, breeching and access doors be free from air leakage, and that boiler surfaces wasting heat be covered with insulation."

The fuel you get will be in direct proportion to the efficiency of your power plant. It's a simple case of "stop wasting or stop burning." The Fuel Administration confirms our contention regarding the extravagance of air leakages. Good air-proofing is a good investment. The cost is nominal, and without it you are practicing extravagant economy.

Arco Seal-A-Set is a composition of elastic gums and asbestos pre-made for the particular purpose of stopping air leaks in boiler settings. It forms an air-proof covering one-sixteenth inch thick, capable of withstanding exposure to con-

tinuous heat or to constant contraction and expansion. *It does not crack, check, split or peel off.*

This plastic composition can easily be troweled on by anybody according to our simple directions.

By raising your power plant efficiency—by stopping the air leaks—you raise your fuel allotment. Users of Arco Seal-A-Set

report fuel savings of from 2% to 10%. When the inspector looks over your power plant he is sure to make note of the condition of your settings, so why not anticipate him and apply Arco Seal-A-Set now? Place your order direct with us.



## THE ARCO COMPANY

ESTABLISHED 1881

GENERAL OFFICES: 239 ARCO BUILDING, CLEVELAND, OHIO

SALES OFFICES: NEW YORK CITY PHILADELPHIA KANSAS CITY

# ARCO

PAINTS VARNISHES ENAMELS





**BY-PRODUCT COKE PLANT OF**  
**Minnesota By-Product Coke Company**  
**ST. PAUL, MINNESOTA**

**Plant Consists of 65 Koppers Ovens**

**Built by**  
**H. KOPPERS COMPANY**  
**PITTSBURGH, PA.**

**Builders of**  
**BY-PRODUCT COKE AND GAS PLANTS**  
**BENZOL AND TOLUOL RECOVERY PLANTS**  
**TAR DISTILLING PLANTS**



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